Chris Bazar
Agency Director

224 West Winton Ave
Room 110

Hayward, California
94544-1215

phone
510.670.5333
fax
510.670.6374

www.acgov.org/cda

ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY

REVISED

Agenda Item_____ July 23, 2019

July 15, 2019

The Honorable Board of Supervisors
County Administration Building
1221 Oak Street, Fifth Floor
Oakland, CA 94612

Dear Board Members:

SUBJECT: SOIL IMPORT ORDINANCE – ADOPTION OF REGULATIONS FOR THE IMPORTING OF SOIL ONTO PROPERTIES IN THE UNINCORPORATED AREAS OF ALAMEDA COUNTY.

RECOMMENDATION:

Conduct a public hearing and first reading and introduction of an ordinance related to Soil Importing in unincorporated Alameda County.

SUMMARY:

Background: At the October 01, 2018 Transportation and Planning Committee meeting, staff was directed to prepare a Soil Importing ordinance to regulate large soil importers. A soil ordinance would allow for continued operation of legitimate agricultural activities that depend on the periodic replenishment of soil for such uses as top-soil, or one-time importing of soil for such purposes as flattening out terrain for farm animal arenas or row crops.

At your May 21, 2019 hearing, the Board continued this item to give staff time to respond to the comments of State regulatory agencies that had provided input. There was concern that the ordinance was overlooking protections to natural resources and should be expanded in scope. Specifically, the Board requested that staff:

1) Require discretionary permits at lower amounts of soil import;
2) Include screening methods to address potential impacts to biology and hydrology;
3) Require phasing of agricultural operations before additional soil is imported;
4) Develop a "tipping" fee for soil importing;
5) Increase fines and/or require bonding for imported soil;
6) Require registration with the County for soil importing at certain amounts; and
7) Establish a finite maximum amount of soil allowed to be imported per property.

The ordinance was updated and presented at the Board's July 9, 2019 hearing. At that time the Board approved of the ordinance generally, and directed staff to continue the item to July 23rd, with further direction to consider fines for illegal dumping and "tipping fees".

DISCUSSION:

The changes to the ordinance described below respond to recent direction by the Board of Supervisors and input received from State Regulatory Agencies:

1) Reduce the amount of soil to be imported before a discretionary permit, such as an Administrative Conditional Use Permit or a Conditional Use Permit, is required.

There have been no changes to the amount of soil to be imported in R-1 zoning districts as compared to the version of the ordinance that was presented to the Board on May 21, 2019. The regulations as presented in the draft ordinance allow small amounts of soil import with minimal oversight, but for higher amounts permits be required. The table below summarizes the various tiers and the requirements therein:

<table>
<tr><td rowspan="10">R-1 Zoning</td><td>Tiers</td><td>1a</td><td>1b</td><td>1c</td><td>1d</td><td>1e</td></tr>
<tr><td rowspan="9"></td><td>1 cu yd/ac</td><td>1 - 10 cu yd /ac/yr</td><td>10 - 20 cu yd /ac/yr</td><td>20 - 50 cu yd /ac/yr</td><td>over 50 cu yd /ac/yr</td></tr>
<tr><td></td><td>30 cu yd /yr max</td><td>50 cu yd /yr max</td><td>80 cu yd /yr max</td><td>over 80 cu yd /yr</td></tr>
<tr><td colspan="5">for Agricultural use</td></tr>
<tr><td colspan="5">3' max vertical depth above existing grade</td></tr>
<tr><td rowspan="4">no permit</td><td colspan="4">"Soil Import Documentation" by "Qualified Professional"</td></tr>
<tr><td rowspan="3"></td><td colspan="2">Statement of Purpose</td><td rowspan="3">CUP</td></tr>
<tr><td colspan="2">ACUP</td></tr>
<tr><td>Neighbor Notification</td></tr>
</table>

The amount of soil allowed to be imported in Agriculturally zoned areas has been reduced from 5,000 cubic yards to 1,000 cubic yards, which is approximately 100 truck-loads. Also, the maximum amount of vertical fill depth dropped to three feet maximum before an Administrative Conditional Use Permit is needed, and to five feet before a Conditional Use Permit is needed:

<table>
<tr><td rowspan="6">Agriculture Zoning</td><td>Tiers</td><td>2a</td><td>2b</td><td>2c</td></tr>
<tr><td rowspan="5"></td><td>up to 10 cu yd /ac/yr
1,000 cu yd /yr max</td><td>10 - 20 cu yd /ac/yr
15,000 cu yd /yr max</td><td>over 20 cu yd /ac/yr
over 15,000 cu yd /yr</td></tr>
<tr><td colspan="3">for Agricultural use</td></tr>
<tr><td>3' max vertical depth above existing grade</td><td>3' - 5' max vertical depth above existing grade</td><td>over 5' max vertical depth above existing grade</td></tr>
<tr><td>"Clean Import Soil" by a "Qualified Professional"</td><td rowspan="2">ACUP</td><td rowspan="2">CUP</td></tr>
<tr><td>Audit of "Soil Import Documentation"</td></tr>
</table>

2) Include additional screening methods to address potential impacts to biology and hydrology.

The ordinance defines:

> "Clean Imported Soil" as natural materials (e.g., soil, clay, silt, sand, gravel, rock, or a mixture or combination for such materials) that have concentrations of naturally occurring chemicals (e.g., metals) at or below background levels at the receiving (or Import) site and concentrations of man-made chemicals below applicable risk based screening levels for human health risk, ecological risk (aquatic and terrestrial receptors), and concerns for nuisance and gross contamination.
>
> "Soil Import Documentation" as technical reports prepared by a Qualified Professional in accordance with the requirements of the County's Protocols for Soil Import and Export.

and

> "Protocols for Soil Import and Export" as the County Department of Environmental Health's Guidance document defining procedures and reporting requirements for characterization and export of proposed soil sources for Import to another site.

These definitions address the San Francisco Bay Regional Water Quality Control Board's concern that soil screening methods should address impacts to biology and hydrology, in addition to impacts to human health. The San Francisco Bay Regional Water Quality Control Board requested that the County Department of Environmental Health's Guidance be used because it is considered a thorough characterization Guidance document that the Waterboard staff would like to see replicated throughout the State.

3) Require phasing of the agricultural operation before additional soil is imported.

The ordinance has been updated to require establishment of agriculture on lands affected by Soil Import as soon as practical as specified by the Director in the approval of a required Agriculture Plan. Interim establishment of agriculture may also be required for affected lands that have been disturbed and that may be disturbed again in future operations. Establishment of agriculture may be done on an annual basis, in stages compatible with continuing operations, or on completion of all soil import, as approved by the County. Each phase of establishment of agriculture shall be specifically described in the Agriculture Plan and shall include (a) the beginning and expected ending dates for each phase; (b) all agricultural activities required; (c) criteria for measuring completion of specific agricultural activities; and (d) estimated costs for completion of each phase of agricultural activities.

4) Add "tipping" fees for all soil to be imported.

The County conducted an initial fee study to determine an adequate staff time recovery cost of drafting this ordinance, and working on the subsequent enforcement, audits, and discretionary permits. Staff determined that the fees to recover staff costs should be $1.26 per ton of soil

imported, for all proposed soil to be imported subject to this ordinance. See the summary spreadsheet below.

$222,980.00	estimate of CUP cost unrecovered in CUP fees (based on an estimate of 20 CUPs for about 575,000 cubic yards)		
$124,600.00	estimate of ACUP cost unrecovered in CUP fees (based on an estimate of 20 ACUPs for about 20,000 cubic yards)		
$25,950.00	estimate of soil importing unrecovered audit tracking costs (based on an estimate of 10 audits per year for about 4,000 cubic yards)		
$373,530.00	estimate of total unrecovered costs for processing projects per year (based on an estimate of 50 projects per year for about 599,000 cubic yards)		
$139,000.00	estimate of unrecovered cost of establishing regulatory program		
$251,680.00	estimate of unrecovered cost of future Code Enforcement		
$764,210.00	unrecovered cost to County of establishing regulatory program, future Code Enforcement, and future audit and discretionary permit cases		
		11	previous requests for exemption from moratorium
$1.26	proposed cost recovery "tipping fee" per cubic yard	593,200	Estimate of cubic yards for previous requests for exemption from moratorium

5) Revise the "tipping fees" based on something other than a calculation per truckload, so that no haulers can reduce their "tipping fees" based on hauling more dirt in larger trailers.

The ordinance proposes "tipping fees" per ton of soil imported, instead of per cubic yard or per truckload. The tonnage shall be established through manifests and bills of lading from the haulers to the receiving property owners, as part of the audit documentation to be kept on-site for five years.

6) Require bonding for imported soil.

The ensure that the stated use of imported soil is implemented, the ordinance would require a financial security in the form and amount determined by the Director, to guarantee faithful performance of the work to be done under the terms of the Soil Import permit and Agriculture Plan or to guarantee reclamation and remediation of the affected property to pre-Soil Import conditions, in the event of failure by the Permittee to implement the terms of the conditions of the permit. Cost estimates for the financial assurance would be submitted to the Community Development Agency for review and approval prior to the permittee securing financial assurances. The amount of the financial assurance would be based upon the estimated costs of implementing the Agriculture Plan or remediating the property to pre-Soil Import conditions.

7) Require registration with the County for all soil importing activity above a certain threshold, but below the discretionary permitting levels.

The ordinance includes language to require registration with the County Community Development Agency for all soil importing subject to this ordinance, per the language below:

"**17.66.040 – Compliance with Existing Laws and Regulations.**

F. For all Soil Import of any volume:
   1. Prior to operations, all property owners Importing Soil subject to this ordinance shall register with the Alameda County Community Development Agency, Planning Department, their intended Soil Importing activity, including providing an Agriculture Plan, and shall pay all administrative fees associated with the proposed Soil Import. Registration shall be in accordance with such forms and procedures as may be adopted by the Director."

8) Establish a finite maximum amount of soil allowed to be imported per property.

The ordinance establishes limitations on soil importing to control for cumulative importing activities. Proposals to import soil above an approved amount shall require a subsequent permitting process. This language is included in the ordinance to prevent over-burdening any one parcel with excessive soil, with maximum amounts in some instances.

9) Consider fines for the haulers who dump soil on the right-of-way or otherwise not on private property within the unincorporated County.

Staff recommends against using this ordinance to establish regulation of dumping of soil or other materials on public right-of-way. This Zoning Ordinance regulates land use on private property in the unincorporated areas only. Staff will look to existing ordinances and the already established Illegal Dumping Taskforce to curtail illegal dumping along public streets.

Planning Commission: At their May 06, 2019 public hearing, the Planning Commission voted 4 to 2 with one excused to recommend that the Board of Supervisors approve the Soil Import Ordinance as recommended by staff. Although the ordinance has changed since their review, the substance of the ordinance to regulate soil import and protection of environmental resources remains in place.

CEQA and Environmental Considerations: Currently, there is no regulation for importing soil if a property owner claims agricultural exemptions. The Soil Importing Ordinance would place restrictions on and close an existing loophole for properties that are currently accepting soil without County regulation. The proposed Soil Importing Ordinance is intended and drafted for the purpose of preservation of the environment and natural resources within unincorporated Alameda County. Therefore, staff considers that the proposed Soil Importing ordinance is exempt from the requirements of the California Environmental Quality Act, per Categorical Exemptions delineated in section 15307 – "Actions by Regulatory Agencies for the Protection of Natural Resources", and Section 15308 – "Actions by Regulatory Agencies for the Protection of the Environment"; and per Section 15061.b.3 – "Common Sense Exemption" that CEQA applies only to projects which have the potential for causing a significant effect on the environment.

CONCLUSION:

Staff believes adopting an ordinance to regulate an activity that may otherwise occur without any oversight to be positive step to address potential impacts to rural lands within the County. If approved as proposed, the Board could direct staff to include a review of the ordinance at future dates so that any implementation concerns can be reviewed and fixed. At those times, Staff could report on the amount of soil being imported, its proposed use, the ability to test and control for soil quality, and any other pertinent data to analyze trends for this activity.

Staff recommends that the Board of Supervisors take public testimony and conduct the first reading of the ordinance.

FINANCING:

Due to the "tipping fee" and bonding requirements that are part of this ordinance, there is no Net County Cost as a result of this action.

VISION 2026:

The approval of this project meets the 10x goal pathways of **Healthcare for All** in support of our shared vision of **Safe and Livable Communities, Thriving and Resilient Communities and Healthy Environment.**

Very truly yours,

DocuSigned by:

Chris Bazar, Director
Community Development Agency

cc: Susan S. Muranishi, County Administrator
Donna R. Ziegler, County Counsel
Melissa Wilk, Auditor-Controller
Jennifer Schulz, County Administrator's Office
Heather M. Littlejohn, Office of the County Counsel
Sandra Rivera, Community Development Agency

ORDINANCE NO. 2019-____

AN ORDINANCE REGULATING SOIL IMPORTING WITHIN THE UNINCORPORATED AREA OF THE COUNTY OF ALAMEDA

SECTION I

In enacting this ordinance, the Board of Supervisors of the County of Alameda makes the following findings:

1. The County of Alameda ("County") regulates land uses in the unincorporated area of the County through various regulations including the General Plan, Specific Plans, and Zoning Ordinance (Title 17 of the Alameda County Ordinance Code); and
2. The County's land use regulations govern the types of land uses that are permitted by right or conditionally permitted; and
3. Chapter 17.06 of the Zoning Ordinance specifies the uses that are permitted and conditionally permitted in the Agricultural ("A") District. Uses permitted by right include various traditionally agricultural uses, such as a crop, vine, tree farm, truck garden, plant nursery, greenhouse, or horticulture and grazing, breeding or training of horses or cattle. Conditionally permitted uses include, for example, a sanitary landfill, composting facility, and packing house for fruits or vegetables; and
4. Chapter 17.08 of the Zoning Ordinance specifies the uses that are permitted and conditionally permitted in the Single-family residence ("R-1") District. Uses permitted by right include a one-family dwelling and a field crop, orchard or garden. Conditionally permitted uses include a plant nursery or greenhouse; and
5. Chapter 17.26 of the Zoning Ordinance specifies the uses that are permitted and conditionally permitted in the Combining Agricultural Use ("L") District, which allows limited agricultural uses. Uses permitted by right include various traditionally agricultural uses, such as keeping a limited number of livestock or fowl and grazing. Conditionally permitted uses include keeping additional livestock or fowl, kennel, boarding stable and riding academies, or sales of any product derived from a permitted use; and
6. Other chapters of the Zoning Ordinance establish permitted and conditionally permitted uses in those zoning districts, including, for example, higher-density residential and commercial zoning districts; and
7. The Board of Supervisors acknowledges that some amount of soil amendment or grading may be required for activities that are permitted or conditionally permitted in a particular zoning district; and that, accordingly, some amount of soil importing is permitted by the Zoning Ordinance to facilitate those permitted uses; and
8. The County has identified properties that have been importing large volumes of soil for commercial purposes, particularly in the A District, in a manner that does not appear to be for traditional agricultural uses or pursuant to a conditional use permit for any conditionally permitted use, and it appears that a number of properties are importing soil while claiming the activity will someday yield a use that is permitted in accordance with the Zoning Ordinance; and
9. Accepting high volumes of deliveries or disposal of soil is distinct from the limited scope of soil importing required to facilitate permitted land uses like traditional farming (e.g., crops, orchard) or building a house; and
10. Importing soil raises land use concerns regarding traffic and road safety, noise, and potential environmental issues such as truck emissions, contamination of soil, surface water and groundwater, and risk to special status species from physical modification of habitat; and
11. Importing soil can introduce impacts to soil, surface water and groundwater, natural resources, topographic aesthetics, transportation and traffic to such a degree that if left unregulated, could result in long term detrimental impacts to County resources; and
12. The County has a compelling interest in protecting biological resources and the public health, safety, and welfare of its residents, visitors and businesses, and in preserving the peace and quiet of the neighborhoods within the unincorporated areas of the County by regulating soil importing as a land use; and

13. For the purposes of regulating soil importing, the California State Water Resources Control Board for the San Francisco Bay Region (Water "Board") recommends that County staff and the regulated community refer to the *Eastern Alameda County Conservation Strategy* (*EACCS*, 2010) for a documented baseline inventory of biological resources and conservation priorities to be utilized during project-level planning and environmental permitting. EACCS was drafted to convey project-level information for use in permitting and environmental compliance with the federal and state endangered species acts (FESA AND CESA), the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and other applicable laws for projects within the study area with impacts on biological resources. The *EACCS* was intended to support and streamline the permitting process. *EACCS* does not create new regulations or change the process by which a project applicant obtains permits for authorization to impact biological resources, and it has not been accepted as a guidance document by the County of Alameda, but it has been accepted as a guidance document by several agencies including USFWS and CDFW.
14. Section 15.36.050 of the County's Grading Ordinance (Chapter 15.36 of the Alameda County Ordinance Code) includes an agricultural exemption, allowing certain grading activities on property zoned as agricultural without a grading permit. In order to qualify for such exemption, the activity must "not result in a cut or fill the failure of which could endanger any structure intended for human or animal occupancy or any public or shared access roadway, or that could obstruct, damage, or cause an illicit discharge to any watercourse or other drainage facility" and must be "performed in accordance with all applicable laws, regulations, and ordinances of the county;" and
15. Exemption from the Grading Ordinance does not make an activity a permitted land use under the Zoning Ordinance; and
16. Correspondingly, any exemptions provided in this ordinance do not exempt any activity from compliance with any other applicable provision of law, including, but not limited to, the Grading Ordinance. For example, activities that are exempt from this ordinance must nevertheless comply with permit requirements of the Grading Ordinance where the activities would "result in a cut or fill the failure of which could endanger any structure intended for human or animal occupancy or any public or shared access roadway, or that could obstruct, damage, or cause an illicit discharge to any watercourse or other drainage facility" or where such activity was not "performed in accordance with all applicable laws, regulations, and ordinances of the county;" and
17. In light of the concerns noted herein, including but not limited to the potential harms to the safety, health, and welfare of the County residents and the environment due to unregulated soil importing, it is in the interest of immediately preserving the environment and public safety, health and welfare to adopt this ordinance; and
18. This ordinance is categorically exempt from the California Environmental Quality Act (CEQA), because there is no possibility that it will have a significant effect on the environment; is an action by a regulatory agency for the protection of natural resources; and is an action by a regulatory agency for the protection of the environment (CEQA Guidelines sections 15061(b)(3)); 15307; 15308); and
19. The Board of Supervisors considers it necessary to adopt this ordinance to explicitly prohibit certain types of soil importing while implementing a process for ensuring the protection of natural resources and the environment when soil is imported.

NOW, THEREFORE, the Board of Supervisors of the County of Alameda ordains as follows:

SECTION II

The Alameda County Ordinance Code is hereby amended as follows:

Paragraph U is added to Section 17.06.040 (regarding conditional uses in the A district) and reads as follows:

"Soil Importing in accordance with Chapter 17.66."

Paragraph I is added to Section 17.08.040 (regarding conditional uses in the R-1 district) and reads as follows:

"Soil Importing in accordance with Chapter 17.66."

Paragraph E is added to Section 17.26.040 (regarding conditional uses in the L combining district) and reads as follows:

"Soil Importing in accordance with Chapter 17.66."

Paragraph h is added to the Little Valley Specific Plan, Chapter IV, Section B.2. (regarding conditional uses) and reads as follows:

"Soil Importing in accordance with Chapter 17.66."

The following text is added to the Little Valley Specific Plan, Chapter IV, Section B.3. (regarding accessory uses):

"Soil Importing may be permitted as an accessory use in accordance with Chapter 17.66."

Chapter 17.66 is hereby added to the Ordinance Code and reads as follows:

Chapter 17.66

17.66.010 - Purpose

This ordinance regulates the importing of soil or other fill material in the unincorporated areas of the County to ensure that such importing is related to appropriate land uses in the zoning district, to promote soil stability, to reduce negative environmental impacts, to reduce human health impacts, to reduce the traffic impacts from delivery vehicles, and to reduce the potential transfer of human and ecological risks between properties due to the import of polluted fill materials, and to reduce the potential import of hazardous wastes to properties accepting fill.

17.66.020 - Definitions

As used in this chapter, the following terms are defined as follows:

A. Agricultural Use means the science or practice of farming or ranching, including cultivation of the Soil for the growing of crops or the rearing of animals to provide food, wool, fabric, or other products. This definition includes, for example, crops, orchards, and animal grazing.
B. Agriculture Plan means the written plan submitted by the property owner that outlines the scope and timeline for the proposed Soil Import operation, implementation of the Agricultural Use, and any associated reclamation activities.
C. Clean Soil is defined as natural materials (e.g., soil, clay, silt, sand, gravel, rock, or a mixture or combination for such materials) that have concentrations of naturally occurring chemicals (e.g., metals) at or below background levels at the receiving lot and concentrations of man-made chemicals below applicable risk based screening levels for human health risk, ecological risk (aquatic and terrestrial receptors), and concerns for nuisance and gross contamination.
D. Director means the Director of the Community Development Agency of the County of Alameda, or designee.
E. Import means the bringing of Soil or other fill material onto a lot from an off-site location, for any purpose.
F. Organic Mulch means decomposed or partially decomposed material comprised of leaves, wood, plant materials, discarded food and food scraps, paper or wood products, animal manure, peat or other biological carbon-based materials; organic mulch is not earth material of any origin that has been excavated from the ground.
G. Protocols for Soil Import and Export means the County Environmental Health Department's published document presenting procedures and reporting requirements for characterization and export of proposed Soil sources for Import to another site.
H. Qualified Biologist means a professional who, by education, training and experience possess the expertise in the branch of science concerning living organisms adequate to evaluate the impacts of Soil Importing on living organisms.
I. Qualified Professional means a licensed geologist or other professional who, by education, training, and experience possesses the expertise necessary to evaluate Soil proposed for Import

in accordance with the County's Protocols for Soil Import and Export to ensure that the Soil is suitable for Import to the site.

J. Soil means all natural earth material including soil, clay, silt, sand, gravel, rock, or a mixture or combination for such materials. Soil specifically does not include trash, debris, piping of any material, wooden boards, logs, branches or chips, broken concrete or asphalt, metal pieces of any kind, plastic, glass, or other human-made materials.

K. Soil Import means the bringing of Soil onto a lot from an off-site location, for any purpose.

L. Soil Import Documentation means technical reports prepared by a Qualified Professional that analyze the Soil to be Imported in accordance with Section 2 (Evaluation of Fill Material Suitability and associated tables) of the County's Protocols for Soil Import and Export.

17.66.030 - General Provisions.

A. Soil Importing is prohibited in the unincorporated areas of the County except as provided in this chapter.

B. All Soil Imported in accordance with this chapter must not contain chemicals at concentrations that exceed the applicable risk-based screening levels, which shall be verified by a Qualified Professional.

1. Soil Import Documentation prepared or reviewed by a Qualified Professional in accordance with this chapter shall be stored for at least 5 years and shall be available for periodic review and audit by the County Planning Department at any time, up to four times per year.
2. If the review or audit demonstrates the Imported Soil has been inadequately characterized of contains chemicals with concentrations exceeding the applicable risk-based screening levels, then the County Code Enforcement Division may refer the matter to other County, State, and Federal agencies.

C. This ordinance does not regulate or prohibit importing the following:

1. Soil purchased from an established retail or wholesale outlet, including hardware stores, soil and stone retailers and wholesalers, landscape centers, and similar commercial soil enterprises. Transport of Soil between properties, such as brokered transports from construction sites, are not considered Soil purchased pursuant to this subsection.
2. Organic Mulch
3. Asphalt grinding or road base (excluding concrete debris), provided that it is used for agricultural road repair only; Importing for other purposes, including for fill, and Importing concrete debris, are prohibited.
4. Movement of Clean Soil from an adjacent lot or a lot separated by no more than a road or utility easement, provided the source lot and destination lot are owned by the same person.

D. Prohibited Operations.

1. Importing the following materials, or fill material containing the following materials, is not permitted pursuant to this ordinance: trash, debris, piping of any material, wooden boards, logs, branches or chips, broken concrete or asphalt, metal pieces of any kind, plastic, glass, or other human-made materials. This ordinance does not regulate sanitary landfills, which require a Conditional Use Permit (Alameda County General Ordinance Code 17.06.035(A)) and compliance with other applicable federal, state, and local laws.
2. Importing earthen materials that contain or include any of the following is prohibited: any human-made or artificial chemicals, substances or contaminants at concentrations greater than those determined through required testing processes to be both: a) safe for human contact; and b) adequate for protection of: watercourses or ponds and the water contained therein, groundwater located or flowing beneath the surface, and biological habitat and native species found on or known to use the subject lot and surrounding lots.

E. Maximum Import per Lot. For tiers of Soil Import under 17.66.050 and 17.66.060 that do not require discretionary review, Soil Import per lot shall be limited to five years. After the fifth

year of Soil Import, an Administrative Conditional Use Permit or Conditional Use Permit will be required for any amount of Soil Imported.

F. Expiration. Any approved Administrative Conditional Use Permit shall expire within one year maximum of its issuance, with the possibility that they may be approved for less time. Any approved Conditional Use Permit shall expire within five years maximum of permit issuance, with the possibility that they may be approved for less time. Proposals to import more soil subsequent to the Administrative Conditional Use Permit or Conditional Use Permit shall require prior approval of a new Conditional Use Permit. No subsequent Administrative Conditional Use Permit shall be possible after the first Administrative Conditional Use Permit is approved for each property.

17.66.040 - Compliance with Existing Laws and Regulations.

A. Compliance with the regulations and requirements of state and federal regulatory agencies is required, including but not limited to the following:
   1. Bay Area Air Quality Management District
   2. California Department of Fish and Wildlife
   3. California Water Resources Control Board San Francisco Bay Region
   4. California Department of Toxic Substances Control
   5. United States Fish and Wildlife Service
   6. U.S. Army Corps of Engineers

B. Issuance of a permit or other authorization to Import Soil pursuant to this ordinance shall not constitute an exemption from other applicable laws or regulations, including but not limited to:
   1. Alameda County Grading Ordinance
   2. Alameda County Watercourse Protection Ordinance
   3. Alameda County Health and Safety Ordinances
   4. Alameda County Business License Tax ordinance
   5. Alameda County Surface Mining Ordinance
   6. California Endangered Species Act
   7. California Surface Mining and Reclamation Act
   8. U.S. Endangered Species Act
   9. U.S. Migratory Bird Treaty Act

C. County Planning Department may provide notice to agencies with jurisdiction over hazardous materials, watercourse and water quality protection, and biological protection of the United States of America and the State of California, including but not limited to each of the above-mentioned agencies, to facilitate enforcement of existing laws and regulations within the jurisdiction of other agencies.

D. Any proposals to Import Soil, or actions to Import Soil, will be subject to notification by the County Planning Department to the aforementioned State and Federal Agencies.

E. Soil Importing must be compliant with any applicable Williamson Act Contract.

F. For all Soil Import of any volume:
   1. Prior to operations, all property owners Importing Soil subject to this ordinance shall register with the Alameda County Community Development Agency, Planning Department, their intended Soil Importing activity, including providing an Agriculture Plan, and shall pay all administrative fees associated with the proposed Soil Import. Registration shall be in accordance with such forms and procedures as may be adopted by the Director.
   2. The following habitat features shall be protected and avoided during the placement of Imported Soil under Tiers 1 or 2 as defined in Sections 17.66.050 and 17.66.060 below:
      a. Seasonal and perennial ponds, including stock ponds.
      b. Riparian corridors along intermittent, seasonal, and perennial creek channels.
      c. Rock outcrops in chaparral habitat.
      d. Upland grassland habitat within 1.3 miles from potential breeding ponds.

e. Burrows.

3. If burrows are present within an area proposed for the placement of Imported Soil, the property owner shall assess the potential presence of special status species at the proposed placement location.
4. A habitat assessment shall be prepared by a Qualified Biologist who has the education, training and experience and possesses the expertise to identify habitat of special status species.
5. Imported Soil shall not be placed in:
    a. Ponds that may support the breeding of special status species (Note: Property owner must comply with existing laws and regulations prohibiting placing fill material in seasonal or perennial ponds without federal and/or State permits for the placement of fill in ponds); or
    b. Riparian corridors (Note: Property owner must comply with existing laws and regulations prohibiting placing fill material in riparian corridors associated with ephemeral, intermittent, seasonal, or perennial streams without federal and/or State permits for the placement of fill in streams).
6. Property owner shall consult with U.S. Fish and Wildlife Service (USFWS) and staff at the California Department of Fish and Wildlife (CDFW), if Soil Import areas occur in areas defined on maps found in Chapter 2 and/or Appendix D of the East Alameda County Conservation Strategy as habitat for special status species, and/or by the Qualified Biologist as providing habitat for special status species.
7. Before Imported Soil is placed in any of the features described below, the property owner shall contact the Army Corps of Engineers, appropriate Water Board, and CDFW to discuss the need to obtain permits prior to placing Imported Soil in these features.
    a. Areas of soggy ground that remain soggy for at least two weeks during the rainy season.
    b. Any stream channel with a defined bed and bank (e.g., a topographic change from the adjacent land), no matter how small or how often water flows through the channel in a typical year.
    c. The bottom of any canyon.
    d. Any pond or impoundment of water, including stock ponds.

17.66.050 - Tier 1 - Soil Importing on Large Lots in the R-1 District

A. Soil Importing is permissible on lots at least one acre in size and not more than five acres in size in the R-1 (or equivalent) district in accordance with this chapter.
B. Any and all Soil Import must be for an Agricultural Use.
C. The depth of Soil Import shall not exceed three feet above existing grade unless it is Imported in accordance with one of following:
    1. A Building Permit from the County Public Works Agency,
    2. A Grading Permit from the County Public Works Agency, or
    3. A Conditional Use Permit issued pursuant to this Title.
D. Soil Importing is regulated in accordance with the following tiered screening and review levels:
    1. Tier 1a - Up to 1 cubic yard per acre per year is permitted as a reasonable accessory use to existing permitted uses.
    2. Tier 1b - Over 1 and up to 10 cubic yards per acre per year, up to a maximum of 30 cubic yards per property per year, may be Imported provided the property owner:
        a. Submits to the County Planning Department Soil Import Documentation prepared by a Qualified Professional.
    3. Tier 1c - Over 10 and up to 20 cubic yards per acre per year, up to a maximum of 50 cubic yards per property per year, provided the property owner:
        a. Submits to the County Planning Department Soil Import Documentation prepared by a Qualified Professional;

b. Obtains an Administrative Conditional Use Permit pursuant to this Title.

4. Tier 1d - Over 20 and up to 50 cubic yards per acre per year, up to a maximum of 80 cubic yards per property per year, provided the property owner:
    a. Submits to the County Planning Department Soil Import Documentation prepared by a Qualified Professional.
    b. Obtains an Administrative Conditional Use Permit pursuant to this Title; and
    c. The County Planning Department provides notification to neighbors in accordance with Alameda County Zoning Ordinance Section 17.54.830.D.
5. Tier 1e - Over 50 cubic yards per acre per year or more than 80 cubic yards per property:
    a. Submits to the County Planning Department Soil Import Documentation prepared by a Qualified Professional.
    b. Obtains Conditional Use Permit pursuant to this Title.

17.66.060 - Tier 2 - Soil Importing on Lots in the A District

A. Soil Importing is permissible on lots in the A (or equivalent) district in accordance with this chapter.

B. Any and all Soil Import must be for an Agricultural Use.

C. The depth of Soil Import shall not exceed three feet above existing grade unless it is Imported in accordance with one of following:
    1. A Building Permit from the County Public Works Agency,
    2. A Grading Permit from the County Public Works Agency, or
    3. An Administrative Conditional Use Permit or Conditional Use Permit issued pursuant to this Title.

D. Soil Importing is regulated in accordance with the following tiered screening and review levels:
    1. Tier 2a - Up to 10 cubic yards per acre per year, up to a maximum of 1,000 cubic yards per property per year and less than three feet vertically in depth above any existing grade is permitted, subject to Section 17.66.030:
        a. Property owner shall ensure the Imported Soil has been characterized as Clean Soil by a Qualified Professional prior to Importing to the site. Subject to audit of the Soil Import Documentation by the County Planning Department.
    2. Tier 2b - Over 10 and up to 20 cubic yards per acre per year, up to a maximum of 15,000 cubic yards per property per year, whichever value is lowest, or any Import in any amount resulting in a depth of between three and five feet vertically above any existing grade:
        a. Property owner must obtain an Administrative Conditional Use Permit pursuant to this Title.
    3. Tier 2c - Over 20 cubic yards per acre per year or more than 15,000 cubic yards per property per year, whichever is lowest, or any Import in any amount resulting in a depth of over five feet vertically above any existing grade:
        a. Property owner must obtain a Conditional Use Permit pursuant to this Title.

17.66.070 - Administrative Conditional Use Permit for Soil Importing

A. An Administrative Conditional Use Permit may be issued in accordance with this chapter (in lieu of Sections 17.52.480, et seq.).

B. In the districts specified in this title, an Administrative Conditional Use Permit may be issued for Soil Importing provided the proposed project does not require the preparation of a new environmental impact report pursuant to the California Environmental Quality Act (CEQA).

C. If the proposed project requires a new environmental impact report, it may not be approved via an Administrative Conditional Use Permit but the project proponent may apply for a Conditional Use Permit in accordance with Section 17.54.130 and this chapter.

17.66.080 - Specific Findings for Administrative Conditional Use Permit and Conditional Use Permit

An Administrative Conditional Use Permit or Conditional Use Permit may be issued for Soil Importing only if the proposed use meets the requirements of Section 17.66.070 (Administrative

Conditional Use Permit for Soil Importing) or Section 17.54.130 (Conditional uses), as applicable, and the following additional findings are made:

A. The amount, design, location, and the nature of any proposed Soil Importing is necessary to establish or maintain an Agricultural Use presently permitted on the property in accordance with Section 17.06.040, Section 17.08.040 or Chapter 17.26 of this title;
B. Soil Importing will not endanger public and/or private property, will not result in excessive Soil being deposited on any public right-of-way, will not endanger public health and safety, and will not impair groundwater or any spring or existing watercourse, or adversely affect the existence of, or habitat for, special status species under the State or Federal Endangered Species Acts;
C. Property owner will minimize the impacts to the natural landscape, scenic, biological and aquatic resources, and erosion impacts that may otherwise be caused by the Soil Import;
D. For Soil Importing associated with a new agricultural building on a development site within the boundaries of a lot, the subject site shall be one that is the most appropriate for the Imported Soil in comparison with other available development sites on the lot, taking into consideration other development constraints and regulations applicable to the lot;
E. Soil Importing and associated grading improvements will conform to the natural terrain and existing topography of the site as much as possible, and should not create a significant visual change;
F. Soil Importing will conform to any applicable General Plan or Specific Plan policies;
G. Soil Import Documentation documenting the suitability of the Soil for Import to the lot has been prepared by a Qualified Professional;
H. Permittee has submitted a truck traffic plan that adequately mitigates impacts from truck traffic generated by the proposed Soil Import; and
I. Permittee has submitted an Agriculture Plan that specifically describes the proposed Agricultural Use to be facilitated by the proposed Soil Import. The Agriculture Plan must identify a reasonable schedule for completing work needed to implement the Agricultural Use.

17.66.090 - Standard Conditions for Administrative Conditional Use Permit and Conditional Use Permit

A. Soil Importing shall be permitted only to the extent necessary to establish or maintain an Agricultural Use presently permitted on the property in accordance with Section 17.06.040, Section 17.08.040 or Chapter 17.26 of this title.
B. The permittee shall obtain and make available to the County Planning Department Soil Import Documentation prepared by a Qualified Professional certifying the suitability of the Soil Import to the site. The Soil Import Documentation must be either:
    1. Provided to the permittee from a Qualified Professional retained by the permittee; or
    2. Provided to the permittee from a Qualified Professional retained by someone other than the permittee (e.g., the Soil Import source property, the shipper or a third party), that has been independently reviewed by a Qualified Professional retained by the permittee.
C. Soil Import Documentation shall be stored for at least 5 years and shall be available for periodic review and audit by the County Planning Department at any time, up to four times per year. If the review or audit demonstrates inadequate characterization of the Soil Import or Soil contamination with chemical concentrations greater than the applicable risk-based screening levels, then the County Code Enforcement Division may initiate enforcement and abatement proceedings and may refer the matter to other County, State, and Federal agencies.
D. Impacts from truck traffic shall be mitigated in accordance with permittee's truck traffic plan.
E. Permittee shall obtain a Grading Permit from the County Public Works Agency, if applicable.
F. Permittee shall implement an Agriculture Plan approved by the Planning Director consistent with the schedule for completion included in the Agriculture Plan. Each day the property owner

fails to meet the deadlines established by the Agriculture Plan and/or the permit shall constitute a separate offense and is subject to penalty in accordance with Section 17.66.150(C)(2).

G. Permits shall be limited in duration to the reasonable time required to Import Soil sufficient to implement the Agriculture Plan, up to a maximum of 1 year for Administrative Conditional Use Permits and up to 5 years for Conditional Use Permits.

H. Annual inspections and reports of soil import and agriculture activities are required. Permittees shall forward an annual report to the Director on each anniversary of the permit issuance date. The annual report shall include a description of the Soil Imported, and the total tonnage of Soil Imported. If requested, a copy of any supporting documentation shall also be provided to the Director.

I. The Community Development Agency shall arrange for inspection of a soil import operation within six months of receipt of the annual report required by this chapter, to determine whether the soil import operation is in compliance with the approved permit and/or Agriculture Plan, and approved financial assurances. In no event shall less than one inspection be conducted in any calendar year. Said inspections may be conducted by the County and/or its consultants. The permittee shall be solely responsible for the reasonable cost of such inspection, including reasonable consultant costs.

J. Permittee shall provide financial assurances sufficient to guarantee completion of the Agriculture Plan or remediation of the property to pre-Soil Import conditions.

K. Permittee shall release the county, and its agents, officers, elected officials, and employees from any injuries, damages, or liabilities of any kind that result from any arrest or prosecution of permittee, delivery operators or brokers, owners or operators of the source material site, or others involved in the Soil Import, for violation of state or federal laws in a form satisfactory to the director.

L. Permittee shall indemnify and hold harmless the county and its agents, officers, elected officials, and employees for any claims, damages, or injuries arising from issuance of the permit, operation of the Soil Import, adoption or enforcement of conditions of the permit, or the County's compliance with CEQA in a form satisfactory to the director.

17.66.100 - Agriculture Plans - Required Content and Implementation.

A. Permittee shall Import Soil only in order to implement an Agricultural Use in accordance with an approved Agriculture Plan. Permittee shall ensure that the Agricultural Use is implemented in accordance with conditions of the permit, the Agriculture Plan, and this chapter.

B. The Agriculture Plan shall specify the amount of soil to be imported by weight and by volume.

C. Implementation – Complete or Phased
   1. The Agricultural Use will be deemed completely implemented when the project is completed (e.g., when construction or all planting is completed) and all approvals required to commence the Agricultural Use (e.g., occupancy permit) have been issued.
   2. Implementation may occur in phases. For phased implementation, the establishment of the Agricultural Use may occur over successive periods following completion of Soil Import at successive locations within the lot, as specified in the Agriculture Plan. In all cases, establishment of the Agricultural Use shall take place as soon as practical. Each phase shall be specifically described in the Agriculture Plan and shall include:
      a. The beginning and expected ending dates for each phase;
      b. All establishment of agriculture activities required;
      c. Criteria for measuring completion of specific establishment of agriculture activities; and
      d. Estimated costs for completion of each phase of establishment of agriculture.
   3. Interim Agricultural Uses may be required if phased or complete implementation is not achieved within the timeframe specified in the Agriculture Plan.

D. Drainage, Erosion and Sediment Control. Agriculture Plans shall address the appropriate control and mitigation for drainage, erosion and sediment control during the Soil Import and implementation of the Agricultural Use. The Agriculture Plan shall specifically address the property owner's plan to comply with the following requirements:
   1. Streams, ponds, wetlands or watershed features shall be avoided or, if affected by soil import, restored in the final stage of establishment of agriculture.
   2. All activities of soil import or establishment of agriculture shall be designed and carried out to minimize erosion, provide for drainage to natural outlets or interior basins designed for water storage, and to eliminate potholes and similar catchments that could serve as breeding areas for mosquitoes.
   3. Silt basins designed to store water during periods of surface runoff shall be equipped with sediment control and removal facilities and protected spillways designed to minimize erosion when such basins have outlet to lower ground.
   4. Final grading and drainage shall be designed in a manner to prevent discharge of sediment above natural levels existent prior to soil import operations.
   5. Upon complete implementation, no condition shall remain that will or could lead to the degradation of water quality below applicable standards of the regional water quality control board or any other agency with authority over water quality.

E. Final Slope Gradient. Agriculture Plans shall address the final slope gradient upon the completion of the Soil Import and implementation of the Agricultural Use and any phases thereof. The Agriculture Plan shall specifically address the property owner's plan to comply with the following requirements:
   1. Final slopes shall be of such gradient as necessary to provide for slope stability, maintenance of establishment of agriculture, public safety, and the control of drainage, as may be determined by engineering analysis of soils and geologic factors.
   2. Final slopes shall not be steeper than two feet horizontal to one foot vertical (2:1) unless the permittee can demonstrate to the satisfaction of the Director that any such steeper slope will not:

a. Be incompatible with future uses approved for the site;
b. Be hazardous to persons that may utilize the site under future uses approved for the site; and
c. Reduce the effectiveness of revegetation and erosion control measures where such are necessary.

3. In no event shall the steepness of slopes exceed the critical gradient as determined by an engineering analysis of the slope stability.

F. Revegetation. Agriculture Plans shall require all lands affected by Soil Importing shall be revegetated for establishment of agriculture unless any such revegetation is determined by the Director to be technically infeasible or not beneficial with respect to the intent of this chapter. Revegetation methods and plant materials utilized for establishment of agriculture shall be appropriate for the topographical, soil and eliminate conditions present at the site. Where agriculture is not to be established, native species shall be used wherever practical.

G. Additional Requirements. The County may impose additional performance standards as developed either in review of individual projects or through the formulation and adoption of generally applicable performance standards.

17.66.110 - Environmental Review.

A. All projects shall comply with the California Environmental Quality Act.

B. The County Planning Department shall be the lead agency for any project requiring environmental review pursuant to the California Environmental Quality Act.

17.66.120 - Fees.

The application fees for a Soil Import permit or approval of an Agriculture Plan, or for modification of an existing permit or approved Agriculture Plan shall be as established by the Board of Supervisors and shall be submitted at the time of application. The County shall establish such fees as it deems necessary to cover the reasonable costs incurred in implementing this chapter and County rations, including but not limited to, processing of applications, annual reports, inspections, monitoring, enforcement and compliance. The permittee shall pay such fees as required by the County, at the time of filing of the Soil Import permit application, Agriculture Plan application, and at such other times as are determined by the County to be appropriate in order to ensure that all reasonable costs of implementing this chapter are borne by the operator.

17.66.130 - Administrative fees.

The property owner shall pay an administrative fee of $1.26 per ton for all Soil Imported to their lot. The quantity of Soil on which the administrative fee is based shall be the total volume of material projected for Import. The fee is payable prior to commencing Soil Import. For projects with phased implementation plans, the fee is payable prior to commencing the Soil Import for each phase. If the amount of Soil Imported differs from the amount projected, the property owner shall either be invoiced or refunded accordingly.

17.66.140 - Performance Assurance Requirement.

A. Financial security in a form and amount determined by the Director, shall be furnished to guarantee faithful performance of the work to be done under the terms of the Soil Import permit and Agriculture Plan or to guarantee reclamation and remediation of the affected property to pre-Soil Import conditions, in the event of failure by the Permittee to implement the terms of the conditions of the permit or of this chapter.

B. Cost estimates for the financial assurance shall be submitted to the Community Development Agency for review and approval prior to the permittee securing financial assurances. The amount of the financial assurance shall be based upon the estimated costs of implementing the Agriculture Plan or remediating the property to pre-Soil Import conditions.

C. If the Board of Zoning Adjustments, following a public hearing, determines that the property owner is financially incapable of implementing the Agriculture Plan or has abandoned its operations prior to implementation, the Director shall:
   1. Notify the property owner by personal service or certified mail that the County intends to take appropriate action to forfeit the financial assurance and specify the reasons for so doing.
   2. Allow the property owner at least thirty (30) and up to sixty (60) days after notification to implement the Agriculture Plan.
   3. Proceed to take appropriate action to require forfeiture of the financial assurance if the permittee does not comply with the provisions of Subsection 2.
   4. Use the proceeds from the forfeited financial assurance to implement the Agricultural Use on the property or remediate the property to pre-Soil Import conditions. The property owner shall be responsible for the costs which are in excess of the proceeds from the forfeited financial assurance.

17.66.150 - Violation – Enforcement and Penalties.

A. If the Director, based upon an annual inspection or otherwise confirmed by an inspection of the property or Soil Import operation, determines that the property or operations are not in compliance with this chapter, the permit, and/or the Agriculture Plan, the County may revoke the permit in accordance with Section 17.54.030 of this Title and may enforce this chapter in accordance with Chapters 17.58 and 17.59 of this Title, as set forth in this section, or as otherwise provided by law.

B. Fines for each violation may be assessed as follows:
   1. Any person, firm or corporation shall be guilty of a separate offense for each and every violation of any provision of this chapter that is committed, continued or permitted by such person and shall be punishable accordingly. Each incident of a vehicle delivering or depositing Soil or other fill material to a property in the unincorporated area of the County shall constitute a separate offense.
   2. Any person, firm or corporation shall be guilty of a separate offense for each and every day during any portion of which any violation of any provision of this chapter is committed, continued or permitted by such person and shall be punishable accordingly.
   3. The fine for each offense is $1000 (one thousand dollars).

C. Procedures and fees for inspections, appeals and abatement shall be as set forth in Chapter 17.59, including Section 17.59.200(D).

D. In addition to the penalties provided in this chapter, any condition caused or allowed to exist in violation of any of the provisions of this chapter shall be deemed a public nuisance and shall create a cause of action for injunctive relief and civil penalties in accordance with Chapter 17.59 of this Code. The remedies provided by this chapter are cumulative and in addition to any other remedies available at law or in equity.

SECTION III

This ordinance shall take effect and be in force thirty (30) days from and after the date of passage and before the expiration of fifteen (15) days after its passage it shall be published once with the names of the members voting for and against the same in the Inter-City Express, a newspaper published in the County of Alameda.

Adopted by the Board of Supervisors of the County of Alameda, State of California, on the ___ day of _____, 2019, by the following called vote:

AYES:

NOES:

EXCUSED:

_____
RICHARD VALLE
President of the Board of Supervisors

ATTEST:

Clerk of the Board of Supervisors,

By: _____
Deputy Clerk

APPROVED AS TO FORM:
DONNA R. ZIEGLER, COUNTY COUNSEL

By: DocuSigned by: Heather Littlejohn
4F16CF9B888B421...
Heather Littlejohn
Deputy County Counsel

ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY

PLANNING DEPARTMENT

Agenda Item #6 July 9, 2019

Chris Bazar
Agency Director

224 West Winton Ave
Room 110

Hayward, California
94544-1215

phone
510.670.5333
fax
510.670.6374

www.acgov.org/cda

June 28, 2019

Honorable Board of Supervisors
Administration Building
1221 Oak Street, Fifth Floor
Oakland, California 94612

Dear Board Members:

SUBJECT: **SOIL IMPORT ORDINANCE** – Development of regulations for the importing of soil onto properties in the unincorporated areas of Alameda County.

RECOMMENDATION

Planning Commission: At their May 06, 2019 public hearing, the Planning Commission voted 4 to 2 with one excused to recommend that the Board of Supervisors approve the Soil Import Ordinance as recommended by staff, without the changes as recommended by the State regulatory agencies: the San Francisco Bay Regional Water Quality Control Board (Water Board) and the State Department of Fish and Wildlife (CDFW).

Board of Supervisors: At the

At your May 21, 2019 hearing; the Board continued this item to give staff time to respond to the comments of State regulatory agencies that had provided input. Specifically, the Board requested that staff:

1) reduce the amount of soil to be imported before a discretionary permit, such as an Administrative Conditional Use Permit or a Conditional Use Permit, was required;
2) include additional screening methods to address potential impacts to biology and hydrology;
3) require phasing of the agricultural operation before additional soil is imported;
4) add "tipping" fees for all soil to be imported;
5) increase fines or require bonding for imported soil;
6) require registration with the County for all soil importing activity above a certain threshold, but below the discretionary permitting levels; and
7) establish a finite maximum amount of soil allowed to be imported per property.

Staff is updating the ordinance based on the comments from the State regulatory agencies, and the input from your Board. We anticipate that the ordinance will be ready to present for a decision to the Board of Supervisors at the July 23, 2019 Board of Supervisors Regular Meeting.

Staff Recommendation: Staff recommends that the Board of Supervisors continue this item until the Board of Supervisors' Regular Meeting of July 23, 2019.

DISCUSSION

Most Recent Input from Regulatory Agencies

Staff continues to work with the State regulatory agencies on the proposed language for the ordinance. Key input has just been received and it will take some additional coordination with County Counsel to incorporate these comments into the County General Ordinance Code. Staff

intends to complete this work in time to have the item heard at your Board's July 23 Regular meeting; below is a summary of comments received.

Per the Regional Water Quality Control Board, inadequately screened and/or carelessly placed soil can put humans and special status species at risk. Human health can be placed at risk if imported soil contains constituents at levels that are associated with unacceptable risks of cancer or other noncancer based health effects. The most significant risk to special status species from imported soil results from physical modification of essential habitat features for those species.

The Water Board has developed Tier 1 Environmental Screening Levels (ESLs) (*Users Guide: Derivation and Application of Environmental Screening Levels (ESLs), Interim Final* (Water Board, 2019)) that represent constituent levels in soil that serve as an aid in assessing the overall threat (pathways and threat level) at a typical soil/groundwater cleanup site. These screening levels allow for understanding whether threats to human health or the environment are adequately controlled. The Tier 1 Soil ESLs consider risks from direct exposure to both humans and terrestrial species, soil contamination leaching to groundwater, and nuisance odors. The Tier 1 Soil ESL human exposure scenario includes children living and playing on the soil and construction workers working (including excavating) at sites containing the screened soils.

The generic site assumptions used to develop the Tier 1 Soil ESLs do not consider special status species (terrestrial or aquatic). Such special status species may be more sensitive to some constituents than the surrogate species used to develop the terrestrial soil ESLs used as Tier 1 Soil ESLs. However, at this time there is not a list of screening levels appropriate to all special status species that may be present in agricultural lands in Alameda County. Also, identifying special status screening levels on a site-by-site basis would be burdensome to the regulated community. Therefore, risks to special status species from imported soil will be assessed with respect to impacts on habitat features that are essential for the life cycles of special status species.

Placing fill dirt on areas that have special status species, such as seasonal or perennial waterways, stock ponds, riparian corridors, rock outcroppings in chaparral habitat, grasslands within 1.3 miles of breeding ponds, or burrows, can remove essential habitat features for these species and entomb any species present when fill is placed over these areas. Prior to placement of soil on these areas, they should be assessed for the potential presence of special status species. A habitat assessment should be prepared by a qualified biologist who has the education, training and experience and possesses the expertise to identify habitat of special status species.

The Water Board recommends that County staff and the regulated community refer to the *Eastern Alameda County Conservation Strategy* (*EACCS*, 2010) for a documented baseline inventory of biological resources and conservation priorities to be utilized during project-level planning and environmental permitting. It was designed to convey project-level information for use in permitting and environmental compliance with the federal and state endangered species acts (FESA and CESA), the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and other applicable laws for projects within the study area with impacts on biological resources. The *EACCS* is intended to support and streamline the permitting process. *EACCS* does not create new regulations or change the process by which a project applicant obtains permits for authorization to impact biological resources, but it has been accepted as a guidance document by several agencies including USFWS and CDFW. *EACCS* does not authorize or provide legal coverage for take of special status species. The landowner should consult with the U.S. Fish and Wildlife Service (USFWS) and staff at the California Department of Fish and Wildlife (CDFW) if the import or export areas occur in areas defined in the *EACCS* and/or by the qualified biologist as providing habitat for special status species. Habitat maps are available on the East Alameda County Conservation Strategy website (http://eastalcoconservation.org/documents/eaccs_ch3_oct2010.pdf).

CDFW has discretionary authority over activities that could result in the "take" of any species listed as candidate, threatened, endangered pursuant to California Endangered Species Act (CESA) (Fish and Game Code, § 2050 et seq.) or rare species under the Native Plant Protection Act (NPPA). (Fish and Game Code, § 1900 et seq.). A CESA permit must be obtained if the project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the project.

Summary of other Federal and State Laws that Project Jurisdictional Waters

The State regulatory agencies have also reminded the regulated community and County staff that, regardless of the draft County soil importing ordinance, there are additional Federal and State laws that protect local waterways, including perennial and seasonal wetlands; ephemeral, intermittent, seasonal, and perennial creeks; seasonal ponds; perennial ponds; and lakes. Regulated ponds usually include stock ponds in the area covered by the Ordinance.

- Federal Clean Water Act prohibits the placement of fill in waters of the U.S. without first obtaining permits from the U.S. Army Corps of Engineers (Corps).
- The California Porter-Cologne Water Quality Act prohibits the discharge of fill to waters of the State without first obtaining Waste Discharge Requirement's from the appropriate Regional Water Quality Control Board.
- CDFW requires a Lake and Streambed Alteration (LSA) Notification, pursuant to Fish and Game Code section 1600 et. seq., for project activities affecting stock ponds, lakes, or streams and associated riparian habitat.

Areas that may be regulated as waters of the U.S. and/or waters of the State include the following:

- Areas of soggy ground that remain soggy for at least two weeks during the rainy season.
- Any creek channel with a defined bed and bank (e.g., a topographic change from the adjacent land), no matter how small or how often water flows through the channel in a typical year.
- The bottom of any canyon is likely to contain a regulated creek channel.
- Any pond or impoundment of water, including stock ponds.

CONCLUSION

Based on the input by the State regulatory agencies summarized above, Staff is drafting an ordinance that includes screening investigation protocols to protect land and water species before the soil is placed on the receiving property. Staff anticipates that the last remaining step in this process -- to format the ordinance for adoption to the County General Ordinance Code -- will be completed in time to agendize for your Board's July 23 Regular meeting.

Very truly yours,

DocuSigned by:
002C10B388294EA...
Chris Bazar, Director
Community Development Agency

Attachments: Table of State Agency Concerns and Recommended Ordinance Revisions

TABLE 1: State Agency Concerns and Possible Ordinance Revisions

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
1.Lead Agency Staffing Inadequate	As lead agency for this Zoning Ordinance modification, general staffing and subject matter expertise at CDA is minimal. Additional staff or consulting services for CDA will become necessary on a permanent basis unless other County Agencies can provide staff with appropriate expertise and time to manage the technical and field requirements for the tasks implied by the ordinance language.	Additional subject matter expertise could be explored and developed.
2. Limited Intent of Ordinance	The Ordinance does not include the following additional reasons for its adoption: (a) to ensure that potential human and ecological risks are not transferred between properties due to the import of polluted fill materials; (b) to ensure that hazardous wastes are not imported to properties accepting fill. These reasons are easily stated, but both imply a highly technical and complex set of requirements that cannot be easily expressed for general use in a land use ordinance. The proposed ordinance itself is missing some of the technical aspects of these reasons, as explained below.	Amend Paragraph 17.66.010, Purpose, to include: *"...to ensure that potential human and ecological risks are not transferred between properties due to the import of polluted fill materials, and to ensure that hazardous wastes are not imported to properties accepting fill."* And Include various amendments as generally described below to strengthen ordinance language to address technical requirements.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
3. Soil Fill in Jurisdictional Waters not addressed	The Ordinance does not caution the regulated community against the placement of imported soil in jurisdictional waters of the State and waters of the U.S., such as creeks and wetlands. It has been assumed that these regulations are left to the Army Corps of Engineers, CDFW, and the Water Board, who have jurisdiction over ephemeral and intermittent creek channels, and the County Public Works Agency, which has jurisdiction over some watersheds. To prevent members of the regulated community from inadvertently placing fill in such waters, the Ordinance's text could be expanded to clarify that the placement of soil in any channels with defined bed and banks, any ponds, and any wetland areas is likely to require state and/or federal authorization, and that failure to obtain appropriate authorization prior to placing fill in those waters may result in state and/or federal enforcement action. To prevent inadvertent violations of state and federal law, the Ordinance should require that property owners have a jurisdictional delineation of waters of the state and of the U.S. performed at sites at which the placement of imported fill is proposed.	The Draft Ordinance already contains Section 17.66.040, Compliance with Existing Laws and Regulations, which specifies compliance with the requirements of these numerous other agencies. That language does not explicitly specify jurisdictional delineation of waters of the state and the U.S. Technically, this is already a legal requirement in order to avoid violations of state and federal law; however, such a directive could be added to ensure that the delineation is done: *"Owners of property receiving imported soil shall have a jurisdictional delineation of waters of the state and of the U.S. performed at sites at which the placement of imported fill is proposed."*
4. Tier 1 Soil environmental Screening Levels (ESLs) alone are not protective of aquatic habitats and special status species.	The Tier I ESLs are intended for evaluating polluted properties, and the concentration levels represent thresholds in soil and groundwater that present insignificant risk or concerns (e.g., odors) to humans, upland terrestrial receptors, and aquatic water column receptors. The ESLs do not address the potential erosion of soil/fill material, dissolved transport in stormwater, or the potential pollution of wetland/stream sediment. The Ordinance could be revised to include a definition of acceptable fill. The ESLs may be used to determine "acceptable" fill for placement in upland areas provided	Language to address this concern in detail would add a level of complexity to the Ordinance that could be difficult to comprehend by Staff or the Public. However, some general language could be added to provide direction to qualified professionals on how to proceed. Soil has already been defined to include only "earthen material lying above the bedrock," and to exclude "trash, debris, piping of any material, wooden boards, logs, branches or chips, broken concrete or asphalt, metal pieces of any kind,

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
	that: (a) no material classifiable as a hazardous waste is imported; (b) any materials placed at the surface are compliant with the polychlorinated biphenyls (PCBs) Total Maximum Daily Load (TMDL) (Water Board 2017); and (c) the fill material is not placed in or adjacent to any sensitive environments (e.g., wetlands; riparian corridors of any ephemeral, intermittent or perennial streams, or the stream channels; or endangered species habitats). In rural and agricultural areas, contaminants in fill soil may pose a significant risk to animals, including listed species. Some agricultural lands in Alameda County include designated critical habitat for species listed under the Federal Endangered Species Act. Levels of contaminants in soil that pose negligible risk to humans may be toxic to CTS and/or CRLF or inhibit the successful breeding of these species. The Ordinance currently does not include provisions to protect biology and habitat from adverse effects of soil fill import. Ideally, at any site at which imported fill may be washed by precipitation into creeks, ponds, or wetlands, the cleanliness of imported soil should be additionally screened using ecological screening levels that are protective of aquatic species, including special status species. This would add a level of complexity to the Ordinance that could be difficult to comprehend by Staff or the Public.	plastic, glass, or other human-made materials"; or "human-made or artificial chemicals, substances or contaminants at measured levels greater than those determined through required testing processes to be safe for human contact, adequate for protection of watercourses or ponds and the water contained therein, groundwater located or flowing beneath the surface, and protection of biological habitat and native species found on or known to use the parcel site and surrounding parcels. Soil specifically does not include Organic Mulch." In order to satisfy this concern, language would need to be added that would protect wetlands, stream channels, bodies of water and endangered species habitats. An example of this could read as follows: *"Testing of Soil for Ecological Screening.* *A. For all soil import subject to an ACUP or CUP as described in 17.66.050 and 17.66.060, all soils shall be tested for Ecological Risk Factors and compatibility with onsite water quality, watercourse and streambed preservation and habitat / special status and aquatic species protection according to protocols and standards recognized by the State of California Water Resources Control Board San Francisco Bay Region and the State of California Department of Fish and Wildlife.*

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
		B. *Acceptable protocols may include, but not be limited to, thorough testing and screening of potential soil for import for all potential applicable contaminants, substances or naturally-occurring hazardous elements and compounds under the supervision of a professional(s) with experience in toxicology, analytical chemistry and statistics; sampling and screening of onsite soils of the receiving parcel(s) for compatibility with soil to be imported; characterization of the receiving parcel(s) for biological habitat, watercourse protection and special status / aquatic species; and when necessary, a Habitat Conservation Plan or other mitigation for adverse effects on watercourses, habitat or biology approved by the State of California Department of Fish and Wildlife."*
5. Environmental Review for many smaller projects would not adequately assess impacts on biology	Ideally and legally, prior to receiving permission to import soil to an agricultural property, the property owner would be directed to have a biological assessment performed to identify the presence of any sensitive biological receptors, such as riparian habitats, ponds, wetlands, or special status species, including the presence of critical habitat for a special status species. If special status species are present... appropriate soil constituent screening levels should be selected to protect the listed species from constituents that may be transported in sediment or leached from sediment into habitat for those species. In addition to identifying appropriate screening levels, the biological assessment should examine the ways in which habitat may be	As described above, new language would be required to explicitly address the concerns of the presence of special status species or special habitats on any of the soil import receiving sites. As currently written in the draft Ordinance, the Tiering system would remove many smaller projects on agricultural lands from any such oversight and evaluation. This concern is difficult to address without either: **(1) Eliminating the Tiering system** proposed in draft Ordinance, which allows smaller

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
	compromised by the import of fill. Where habitat used by special status species may be negatively impacted, the property owner should be directed to consult with CDFW and the U.S. Fish and Wildlife Service. Currently, no such specific requirement is included in the draft Ordinance. For all soil fill import action on properties where no Conditional Use Permit is required – up to 15,000 cubic yards per year in many cases – no environmental review would be required. This may mean that no vehicle for soil characterization prior to receipt would be available to the lead agency. The potential for receipt of uncharacterized contaminated soil or placement of soil that would pose a risk to biology and ecology could be substantial.	projects to proceed without proactive oversight by the County; or **(2)** Revising the text to apply biological and toxicological evaluation requirements as shown above **to all tiered projects or a much larger subset of them,** with evaluation of both the receiving lands and the imported soils, including smaller ones.
6. Ordinance does not include detailed protocol to develop a sampling plan capable of establishing that imported soil is sufficiently clean ("acceptable") for placement in agricultural lands.	The Ordinance does not explicitly provide guidance for assessing the cleanliness of soil proposed for importation to agricultural lands. In assessing contaminant levels in soils, it is standard practice to specify the minimum sampling density necessary to establish that the soils have been sufficiently characterized [...]The Ordinance leaves out details [to assess cleanliness of soils], which include the following standard procedures in the evaluation of soils: • Required minimum sampling density; • A protocol for determining that sufficient samples have been collected • List of analytes that must be tested for in the soil; • Analytical methods considered acceptable to assessing concentrations of contaminants in soils; • Required reporting levels for analytical methods; • Protocols for assessing data when method reporting limits are higher than appropriate screening levels;	Amend the draft Ordinance to include language as follows, to either augment or replace existing language as appropriate: ***"Screening Requirements (Appropriate List of Analytes for Testing / Screening).*** *Soil shall be screened in accordance with Sections 17.66.050 and 17.66.060 above and the following requirements:* 1. *Tier 1 ESL* 2. *Other Screening Levels as described in this Section,* 3. *The soil shall be tested in accordance with the standards established by the San Francisco Bay Regional Water Quality Control Board in its "Beneficial Use of Dredged*

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
	• Acceptable calculations for establishing the likely range of contaminant concentrations in soils; • Acceptable quality assurance/quality control procedures to ensure that data are of sufficient quality to be used in screening prospective soil fill. • Specification of the level of certainty required for concluding that soil has met the appropriate screening guidelines (e.g., whether an 80 percent upper confidence interval or a 90 percent upper confidence level would be an acceptable metric for comparison with appropriate screening levels). Water Board staff have suggested two protocols that may be of use in the Ordinance: (a) the Alameda County Department of Environmental Health – Local Oversight Program's August 1, 2018, Fill Material Characterization Guidance (the underlying documents for which are referenced in the Ordinance text); and (b) the Hawai'i Department of Health's October 2017 Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material.	*Materials: Sediment Screening and Testing Guidelines, Draft staff report" (2000), as amended, or other source recommended by the State of California Water Resources Control Board San Francisco Bay Region.* ***Testing of Soil for Human Safety According to Established Protocols.*** *For all soil import subject to an ACUP or CUP as described in 17.66.050 and 17.66.060, all soils shall be tested for compliance with Tier 1 ESL according to protocols and standards recognized by the State of California Water Resources Control Board San Francisco Bay Region, and the Alameda County Department of Environmental Health.* *Acceptable protocol may include those set forth in the County Department of Environmental Health document, "Fill Material Characterization Guidance" (August 1, 2018 or later versions), or similar protocol as approved by the State of California Water Resources Control Board San Francisco Bay Region. "*

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
7. The Ordinance does not yet include a protocol for selecting the constituents that must be analyzed for in soil to ensure that imported soil is sufficiently clean for placement in agricultural lands.	The Ordinance does not describe how to determine which elements and chemicals must be included in the list of analytes to be measured in soil proposed for import to agricultural lands. The text does describe required analytes in soil imported from agricultural lands or imported from areas adjacent to roadways, but the rationale used in each of those discussions is incomplete. The Ordinance requires that soils derived from a source that has been in agricultural production in the last 50 years must be analyzed for agricultural chemicals (fertilizers, herbicides, and pesticides). Residential areas with lawns and commercial properties with landscaping are also likely to have residues of fertilizers, herbicides, and pesticides in soils. Water Board staff have observed that the upper two to three feet of soils used in agricultural production usually have pesticide levels that are not compatible with placement in or adjacent to aquatic habitat. The Ordinance requires that soils adjacent to a freeway, state route, or major arterial roadway be analyzed for asbestos and lead contamination. This list could be expanded to include copper, which is present in many brake shoe formulations and is highly toxic to aquatic life. Soils adjacent to roadways should also be tested for petroleum hydrocarbons and combustion byproducts (e.g., PAHs). Also, since electric power lines often parallel roadways, soils adjacent to roadways should be tested for PCBs, which were a constituent of transformer fluids for many years. Finally, since maintenance crews often use herbicides to control road side vegetation, these soils should be analyzed for herbicides.	Amend the draft Ordinance to include language as follows, to either augment or replace existing language as appropriate: ***"Screening Requirements (Appropriate List of Analytes for Testing / Screening).*** *Soil shall be screened in accordance with Sections 17.66.050 and 17.66.060 above and the following requirements:* 1. *Tier 1 ESL* 2. *Other Screening Levels as described in this Section,* 3. *The soil shall be tested in accordance with the standards established by the (San Francisco Bay Regional Water Quality Control Board in its "Beneficial Use of Dredged Materials: Sediment Screening and Testing Guidelines, Draft staff report" (2000), as amended, or other source recommended by the State of California Water Resources Control Board San Francisco Bay Region.* Amend Paragraph 17.66.060(E)(2) to include *recommended testing for copper, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), and common roadside herbicides.* In all cases, a qualified professional (defined in the Ordinance as a licensed geologist or other professional who, by education, training and

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
	The Ordinance's language regarding asbestos could be updated...Information regarding the regulation of airborne asbestos is available from the Air Resources Board. Information regarding managing asbestos hazardous waste is available from the Department of Toxic Substances Control. Beyond listing potential agricultural- and transportation-related contaminants, the Ordinance does not yet provide guidance on the appropriate list of analytes to be selected for screening soils. Unless specific documentation exists for a given source of soil that rules out some classes of contaminants, Water Board staff suggests that soils should be screened for a full suite of metals, volatile organic compounds, semi-volatile organic compounds, polyaromatic hydrocarbons, PCBS, pesticides, herbicides, and fertilizers. The full list of analytes presented in the Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines. Draft staff report (Regional Water Quality Control Board, 2000) should be used in testing soils, unless sufficient documentation is available to exclude the likely presence of a class of contaminants in a soil source. Such documentation may include Phase 1 and Phase 2 Environmental Site Assessments of the proposed source site.	experience possesses the expertise in testing and analyzing Soils necessary to accurately evaluate the chemical properties of the Soil, including but not limited to, the ability to determine appropriate screening levels for toxicity for various applications and land uses) would need to be in charge of soil screening and analysis for these issues.
8. Ordinance does not include protocol for screening imported soil for materials other than elements and chemicals that may negatively impact habitat quality at the receiving site.	In addition to screening soils for harmful levels of elements and chemicals, the Ordinance should set requirements for trash and invasive plant species seedstocks. To prevent imported soil from functioning as a landfill, the Ordinance should specify screening protocols to ensure that the imported soil does not contain significant trash or debris. Also, invasive plant species are dominant in many developed areas of the County. Depositing fill soil in agricultural areas may introduce new seed stocks from	The draft Ordinance already includes language that explicitly excludes any trash or debris as fitting the definition of soil. Any soil not pre-screened for this material is not permitted to be imported. Staff has not yet been able to determine whether an adequate method of screening large masses of soil for nonnative and weedy seeds, or whether this problem can be surmounted. It may be possible to

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
	invasive species into habitat at the fill site and compromise populations of native plant species. The Ordinance should include protocols that minimize and avoid the spread of invasive plant seed stock.	achieve this task after seed germination at the receiving site using a method called soil solarization, but this requires intensive work and a large amount of land across which to spread the soil, and may be impractical for all but very small volumes of soil. Moreover, most land in Alameda County is already adversely affected by invasive nonnative species which have become common.
9. Ordinance exempts soils from analysis if obtained within the same zoning designation of Agriculture or PD or if imported from a Licensed and Permitted Retailer or Wholesaler.	The Ordinance does not require soil to be tested if it is imported from the same zoning designation or if soil is imported from a Licensed and Permitted Retailer or Wholesaler. Technical bases for these exemptions are not provided. Because of the combination of alluvial and tectonic processes in the shaping of landforms in the Bay Area, the chemical compositions of soils can vary significantly over relatively small distances. In addition, some Bay Area soils have elevated levels of metals that are toxic to wildlife at relatively low concentrations, including arsenic, cadmium, mercury, nickel, selenium, and thallium. In subregions in which elevated levels of these metals occur in soils, the local flora and fauna have often adapted to these metals over many generations. Moving soils from such a source area to an area that does not contain elevated levels of some of these metals is likely to have a negative impact on flora and fauna at the fill location. This is not addressed in the Ordinance.	For soils to be moved within the same zoning designation, from one agricultural parcel to another, language similar to that described above would provide adequate testing of the soils, but Paragraph 17.66.060(E) would need to be amended to eliminate the exemption allowed under the language: *"exemption for Imports from a source parcel within the Agricultural (A) district in the unincorporated areas of the County of Alameda or equivalent districts in other jurisdictions shall be exempt from the tiered requirements above..."* Licensed and permitted retailers or wholesalers include surface mining operations and home and garden supply businesses who sell landscaping materials, either in bulk or in small quantities. Water Board staff assert that these businesses do not always screen soils for potential toxicity to special status species, and also assert that unless retailers and wholesalers have data available that demonstrates that constituents in the soils do not exceed acceptable concentrations for safe exposure of special status species, soil from these sources should be tested to verify that it is safe to use in potential listed species habitat. CDA staff acknowledges that this may be the case, but this

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
		would go far beyond any kind of regulation ever envisioned by the County, would affect materials that have not been involved in the problems this Ordinance is designed to correct, and would go beyond the intention of the Ordinance.
10. The Ordinance has not been reviewed under the California Environmental Quality Act (CEQA).	The County proposes to satisfy the requirements for review under CEQA by referencing the Categorical Exemptions from review under Sections 15307 and 15308 of the CEQA Guidelines. **15307. Actions by Regulatory Agencies for Protection of Natural Resources** Class 7 consists of actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment. Examples include but are not limited to wildlife preservation activities of the State Department of Fish and Game. Construction activities are not included in this exemption. **15308. Actions by Regulatory Agencies for Protection of the Environment** Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption. Water Board Staff have expressed concern that the regulation proposed are not sufficiently protective of wildlife, including special status wildlife and associated	CDA Staff has prepared this regulation on the premise that the activity in question – soil import and placement for any agricultural reason and at any level – is already unregulated under existing County ordinance, and that any stricter regulation on that activity, such as the draft Ordinance, satisfies the concept that natural resources and the environment will receive greater protection than previously as a result. It is acknowledged that conducting a CEQA review on this proposal would provide maximum transparency of potential impacts of the soil import activity being regulated, and the most solid legal foundation for approval of this Ordinance.

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
	critical habitat, to satisfy the requirements of these exemptions and justify use of the proposed categorical exemptions.	
11. California Endangered Species Act and Native Plant Protection Act	CDFW has discretionary authority over activities that could result in the "take" of any species listed as candidate, threatened, endangered pursuant to California Endangered Species Act (CESA) (Fish and Game Code, § 2050 et seq.) or rare species under the Native Plant Protection Act (NPPA). (Fish and Game Code, §1900 et seq.). A CESA permit must be obtained if the project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of a CESA permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the project and mitigation measures may be required in order to obtain a CESA Permit.	The Draft Ordinance already contains Section 17.66.040, Compliance with Existing Laws and Regulations, which specifies compliance with the requirements of these numerous other agencies, including CDFW. That language does not explicitly specify Jurisdictional authority over the "take" of any species listed as candidate, threatened, or endangered pursuant to CESA or rare plant species under the Native Plant Protection Act (NPPA), or that a CESA permit must be obtained. Technically, this is already a legal requirement in order to avoid violations of state and federal law, and for those proposals that require CEQA analysis, these obligations would be fulfilled. However, there is the risk of missed obligations for consultation with the relevant State agencies for projects that fall under Tiers in which no County permit would be required and no CEQA analysis would be performed. There are multiple ways to address this issue. The following directive could be added to ensure that the obligation is known and fulfilled for all properties receiving imported soil: *"Owners of property receiving imported soil shall consult with CDFW and if required, obtain a CESA permit if the project has the potential to result in*

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
		"take" of plants or animals listed under CESA, either during construction or over the life of the soil import project. Issuance of a CESA permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the project and mitigation measures may be required in order to obtain a CESA Permit." Or, as in No. 5 above, this level of consultation could be explicitly required for all or most Tiers of soil import; or finally, the Tiering system could be discarded in favor of full permitting, environmental analysis and soil screening for all import projects large and small. In all of these scenarios, however, the obligation of lead agency status for any CEQA analysis required to fulfill this obligation would fall to the County.
12. Lake and Streambed Alteration	CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et. seq., for project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA	As in No. 11, The Draft Ordinance already contains Section 17.66.040, Compliance with Existing Laws and Regulations, which specifies compliance with the requirements of numerous other agencies, including CDFW. Also, as for No. 11, a directive could be added to ensure that the obligation is known and fulfilled for all properties receiving imported soil: *"Owners of property receiving imported soil shall consult with CDFW and if necessary, prepare an LSA*

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
	Agreement (or Incidental Take Permit) until it has complied with CEQA as a Responsible Agency.	*Notification, pursuant to Fish and Game Code section 1600 et. seq., for project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. Issuance of a LSA Agreement is subject to consideration of a CEQA document for the Project."* Or, as in Nos. 5 and 11 above, this level of consultation could be explicitly required for all or most Tiers of soil import; or finally, the Tiering system could be discarded in favor of full permitting, environmental analysis and soil screening for all import projects large and small. In all of these scenarios, however, the obligation of lead agency status for any CEQA analysis required to fulfill this obligation would fall to the County.
13. Ordinance will result in significant biological impacts; substantial CEQA analysis should be required.	CDFW anticipates that significant impacts to the environment will result from the proposed Ordinance since the areas covered under the Ordinance are known to provide habitat for state and federally listed species and other special-status species. Suitable habitat is present within unincorporated Alameda County for numerous federally and state threatened species.	CDA Staff has prepared this regulation on the premise that the activity in question – soil import and placement for any agricultural reason and at any level – is already permitted and unregulated under existing County ordinance, and that any stricter regulation on that activity, such as the draft Ordinance, satisfies the CEQA Guidelines concept that natural resources and the environment will receive greater protection than previously as a

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
	Take of special-status species in the form of mortality (i.e., "kill") may occur as a result of soil importation activities from heavy equipment/vehicle strikes; burrow collapse associated with earthwork, removal of vegetation or burial of vegetation, earthwork activities at the Project site resulting in crushing or suffocation, entrapment and desiccation of underground individuals; crushing by heavy equipment and materials, or under the weight of vehicles driving through habitat; entombment of individuals from deposition of stockpiled soil over occupied burrows, and during vegetation, top soil, or soil compaction, and development of access roads. Indirect impacts of the importation of soil could also include adverse effects to the special-status species related to temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts. Therefore, CDFW advises a Negative Declaration is not appropriate for this Project.	result. It is acknowledged that conducting a CEQA review on this proposal would provide maximum transparency of potential impacts of the soil import activity being regulated, and the most solid legal foundation for approval of this Ordinance.
14. Fully Protected Species and Birds	CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. "Take" of any Fully protected species is generally prohibited and CDFW cannot authorize "take" except in limited circumstances; for example, under the authority of the Natural Community Conservation Planning Act. (Fish and Game Code, § 2800 et seq.). CDFW has jurisdiction over actions that may result in the disturbance or destruction of nests or the unauthorized "take" of birds. Fish and Game Code sections 3503, 3503.5, and 3513 prohibit the following: unlawful "take," possession or needless destruction of the nest or eggs of	The Draft Ordinance already contains Section 17.66.040, Compliance with Existing Laws and Regulations, which specifies compliance with the requirements of numerous other agencies, including CDFW. As in Nos. 5, 11 and 12 above, a directive could be added to encourage initial communication between all project proponents and CDFW, or CEQA review could be required for all Tiers of projects to ensure that these concerns are addressed.

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
	any bird; unlawful "take," possession, or destruction of any birds-of-prey or their nests or eggs; and unlawful "take" of any migratory nongame bird.	
15. Water Pollution	It is unlawful to deposit in, permit to pass into, or place where it can pass into the "Waters of the State" any (1) petroleum, acid, coal or oil tar, lampblack, aniline, asphalt, bitumen, or residuary product of petroleum, or carbonaceous material or substance, (2) refuse, liquid or solid, from any refinery, gas house, tannery, distillery, chemical works, mill, or factory of any kind, (3) sawdust, shavings, slabs, or edgings, (4) any factory refuse, lime, or slag, (5) Cocculus indicus, (6) substance or material deleterious to fish, plant life, mammals, or bird life. (Fish and Game Code, § 5650)...."Waters of the state" means any surface water or groundwater, including saline waters, within the boundaries of the state.	Please refer to Nos. 2 – 9 above. In these, Staff has attempted to develop possible methods to address concerns about effects to Waters of the State. The current draft ordinance does not currently include language to this effect for all Tiers of soil import.

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION
16. Scope and content of Environmental Review	The commenting agency, CDFW, provides an extensive template for analyzing and assessing the level of environmental impacts that could arise from adoption of the Ordinance and the types of soil import / agricultural projects that could be allowed or permitted under it. The comment focuses exclusively on the preferred CEQA process, an EIR, that the agency encourages, whether for the Ordinance in a cumulative way or for individual projects that may result.	CDA Staff has prepared this regulation on the premise that the activity in question – soil import and placement for any agricultural reason and at any level – is already permitted and unregulated under existing County ordinance, and that any stricter regulation on that activity, such as the draft Ordinance, satisfies the CEQA Guidelines concept that natural resources and the environment will receive greater protection than previously as a result. It is acknowledged that conducting a CEQA review on this proposal would provide maximum transparency of potential impacts of the soil import activity being regulated, and the most solid legal foundation for approval of this Ordinance. If the process for this Ordinance should shift toward a CEQA analysis, staff recommends consideration of the environmental review template provided by CDFW. This recommendation also applies to individual projects pursuant to the Ordinance so far as permitting authority by County will allow.
17. Filing Fees	CDFW anticipates that the Ordinance will have an impact to fish and/or wildlife habitat, and assessment of filing fees is necessary. (Pub. Resources Code, § 21 089; Fish and Game Code, § 711.4). Fees are payable upon filing of the Notice of Determination.	If the process for adoption of this Ordinance should shift toward a CEQA analysis, the County would pay the appropriate filing fee as required by law. However, each implementation project under this Ordinance that requires a CEQA analysis will likewise be required to pay the filing fee.

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

CONCERN	DESCRIPTION OF ISSUE	POSSIBLE SOLUTION

NOTE: Issues 1 – 10 are from San Francisco Bay Region, State Water Quality Control Board, letter of April 8, 2019. Issues 11 – 17 are from California Department of Fish and Wildlife, letter of February 7, 2019.

ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH LOCAL OVERSIGHT PROGRAM	**Revision Date:** NA
	ISSUE DATE: August 1, 2018
	Previous Revisions: NA
SUBJECT: Fill Material Characterization Guidance	

INTRODUCTION:

This document has been prepared by Alameda County Department of Environmental Health (ACDEH) to provide guidance regarding the characterization of fill materials to determine: (a) the suitability of the fill material for import to sites within Alameda County, including but not limited to agricultural lands, redevelopment sites, and environmental cleanup sites, and (b) the suitability of the fill material for export from environmental cleanup sites regulated by ACDEH and re-use at other locations.

The use of imported fill material has recently come under scrutiny in Alameda County due to the identification of agricultural properties in rural portions of the county that have been importing large volumes of fill material. These areas have a diverse natural environment including biological habitats, aquatic environments, wetlands, and critical groundwater basins, which require protection and have the potential to be adversely impacted from contaminated fill material.

There are currently no established standards in the statutes or regulations that address environmental requirements for imported fill material. However, regulatory guidance documents have been developed by the California Environmental Protection Agency (CalEPA), Department of Toxic Substances Control (DTSC) and the San Francisco Regional Water Quality Control Board (the "Regional Water Board") regarding the characterization and sourcing of imported fill material. The CalEPA guidance documents were prepared to address fill material being imported to active environmental cleanup sites, however, are also applicable to other sites where imported fill material may pose a risk to sensitive receptors and the environment.

This guidance document has been prepared by ACDEH to ensure that unsuitable fill material is not introduced onto properties with sensitive land uses and to provide clarification of the process of evaluating the suitability of fill material. This document addresses both human health and ecological risk associated with exposure pathways to fill material and identifies fill sources which are unsuitable for use as fill material based on current and historic land use activities as discussed in the CalEPA guidance documents and as required by other authorities specific to Alameda County. The protocols and criteria presented in this document are intended to be sufficiently conservative to be applicable to all sites regardless of land use or other site characteristics. Alternative criteria for fill characterization and suitability may be proposed for consideration by ACDEH via submittal of a site-specific soil import management plan and associated supporting technical documents.

This guidance document was prepared based on the following:

(1) Regulatory guidance documents adopted by the DTSC and Regional Water Board;

(2) Applicable risk based screening levels;

(3) Regional background levels;

(4) Other criteria provided to ACDEH by designated Groundwater Basin Managers within Alameda County; and

(5) Accepted industry practices.

Section 1 of this guidance document discusses criteria for assessing and identifying potentially suitable fill material sources. **Section 2** discusses the evaluation of the suitability of potential fill material. **Section 3** discusses ACDEH's fill material import suitability determination process. **Section 4** describes the conditions and reporting requirements for importing suitable fill material.

1. ASSESSMENT OF POTENTIALLY SUITABLE FILL MATERIAL SOURCES

Suitable fill materials are materials that will not have an adverse effect on human health or the environment when imported. Prior to collecting analytical data to confirm suitability of potential fill material, potential source areas should be screened based on historical land use and material composition.

Historic and current land use at, and in the vicinity of, the parcel containing the proposed fill material should be evaluated for environmental impacts to determine the applicable laboratory analysis that should be conducted to characterize the fill material. This assessment consists of the review of historical records and typically consists of conducting a phase one environmental site assessment (Phase I ESA) or preliminary environmental assessment (PEA) within six months of the assessment. The assessment should be sufficient to identify Recognized Environmental Conditions (RECs). RECs are typically associated with the production, use, storage, transport, recycling, or disposal of hazardous materials or waste at or in the vicinity of the parcel being evaluated and are used to determine what potential contaminants may be present and therefore should be analyzed for.

Fill material from parcels with the following conditions are not suitable for use as a proposed fill material source without additional evaluation and approval from ACDEH beyond what is required in this guidance:

a. Regulated environmental cleanup sites; or
b. Unaddressed or insufficiently addressed RECs; or
c. Current or historic industrial land uses; or
d. Current or historic unacceptable commercial land uses. Unacceptable commercial land uses are operations that generate revenue through, or that significantly involve:
    i. Manufacturing, repairing, or restoring operations; or
    ii. Providing maintenance services; or
    iii. The use, storage, transport, or disposal of hazardous materials or waste.
e. Materials containing animal or human waste or debris such as lumber, metal, or refuse

2. EVALUATION OF FILL MATERIAL SUITABILITY

Proposed fill material source areas that are considered potentially suitable based on the initial screening of historic and current land use must be sampled, analyzed, and meet applicable environmental and human health risk levels before a final determination of the suitability of the proposed fill material can be made. Sampling protocols and strategies, and laboratory analyses vary based on conditions at the location being sampled, the type of compounds that are being evaluated, and the volume of fill material. Samples must be collected and analyzed in a manner sufficient to characterize the lateral and vertical extents of the proposed fill material source area. Minimum sampling and analysis requirements to evaluate the suitability of a proposed fill material source area are derived from various regulatory guidance documents, industry best practices, and requirements from designated Groundwater Basin Managers within Alameda County which are described in further detail below.

2.1. Minimum Analytical Requirements

Minimum analytical requirements for characterization of potentially suitable fill material proposed for import to a destination (a) outside of the jurisdiction of Zone 7 Water Agency (Zone 7); or (b) within the jurisdiction of Zone 7

are provided in Table 1a and Table 1b, respectively. Sampling and laboratory analysis must be conducted in accordance with the following requirements:

A. All analysis must performed in accordance with the United States Environmental Protection Agency's (USEPA's) SW-864 Compendium;

B. Analysis of samples must be completed and reported by an analytical laboratory accredited by the California State Environmental Laboratory Accreditation Program and the National Environmental Laboratory Accreditation Program;

C. The laboratory reporting limits must not exceed the screening levels adopted by ACDEH as described in Section 2.4 below;

D. The laboratory reporting limits must be reported on a dry-weight basis; and

E. The results of the laboratory analysis must be reported in a standard laboratory data package, including a summary of the quality control and quality assurance sample results and chain of custody documentation.

2.2. Minimum Sampling Requirements

Sampling for the characterization of potentially suitable fill material must be conducted under the direct charge of a professional engineer or geologist licensed in the state of California and in accordance with industry best practices including, but not limited to those discussed in the subsections below.

2.2.1. Vapor Forming Compounds

Vapor forming compounds consist of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) that readily form a vapor when exposed to air. In order to minimize volatilization of VOCs and SVOCs during sample collection, and ensure that analytical results are representative of the proposed fill material, discrete samples must be collected and analyzed in accordance with United States Environmental Protection Agency (USEPA) Method 5035. Composite sampling is not acceptable for the evaluation of VOCs and SVOCs.

2.2.2. Composite Sampling

Composite sampling is acceptable under the following conditions:

1. Analysis is for non-vapor forming chemicals;
2. The composite sample is comprised of no more than 4 discrete samples;
3. The composite sample is comprised of roughly equivalent masses of each of the discrete samples;
4. Sufficient mass of discrete samples from each of the composited locations are submitted so as to allow for analysis of the discrete samples; and
5. Each of the discrete samples that comprise the composite sample must be analyzed in the event that the composite sample exceeds 25% of the applicable screening level.

2.2.3. In Situ Characterization

Pre-excavation (e.g., In Situ) characterization of potentially suitable fill materials must meet the minimum requirements for provided in Table 2a (for import to a destination outside of the jurisdiction of Zone 7 Water Agency's jurisdiction) and Table 2b (for import to a destination within the Zone 7 Water Agency's jurisdiction). Additional requirements include:

- Characterization of soil lithology in the proposed source area using the Unified Soil Classification System from the ground surface to the total depth of the proposed excavation for the fill material. The

characterized soil lithology at each sample location must be presented as a soil boring log and must be reviewed and stamped by a registered geologist.

- Collection and analysis of at least one sample from each sample location for every five feet below ground surface that the proposed fill area extends.
- Characterization of layers of proposed fill material that exhibit significantly different geological characteristics or lithologies as separate sources. For example, if soil at a site generally consists of clay from the ground surface to a depth of 3 feet below ground surface with interbedded silts and sands beyond, the clay layer should be characterized and managed one source and the interbedded silts and sands should be characterized as a second source.
- Use of direct push technology for sample collection and analyses for VOCs and SVOCs. Samples collected for analysis of non-vapor forming compounds may be collected using direct push technology, augers, or from a bucket, sidewall, or base sample from "pot hole" excavations.

2.2.4. Stockpile Characterization

The minimum sample quantities for the characterization of potentially suitable fill materials that have been excavated and stockpiled are based on the total volume of the stockpiled fill material and are summarized in Table 3. Stockpiles must be generated from the same source area, must be segregated by fill material composition, and be located on the parcel generating the proposed fill material. Samples being analyzed for VOCs and SVOCs must be collected from at least 1 foot below the exposed surface of the stockpile.

2.3. Conditions Requiring Additional Sampling and Analysis

In addition to the minimum sampling requirements identified above, the following conditions, if present, require additional sampling and analysis as indicated:

1. **Evidence of Contamination** – Samples must be collected and analyzed from any locations where there is evidence of contamination such as strong odors, staining, observable sheen or free product, stressed vegetation, and/or elevated responses from field screening instruments such as a photoionization detector.
2. **Contaminants Associated with Surface Deposition** – When characterization for contaminants associated with surface deposition (e.g., pesticides, herbicides, fungicides, asbestos, and lead) are required for fill material characterization, representative samples must be collected from surface and near surface soils in accordance with the following:
    - For in situ characterization, one sample should be collected from each of the following intervals from each sample location: 0 to 6 inches below ground surface; 6 inches to 2 feet below ground surface; and 2 feet to 3 feet below ground surface; and
    - For stockpiled fill materials, fill material from the surface and near surface (0 to 3 feet below ground surface) must be segregated from other fill material and characterized as a separate potential fill source.
3. **Groundwater and Saturated Soil** – If groundwater or saturated soil is encountered during fill characterization or excavation, the following additional samples must be collected and analyzed:
    - One soil sample per sample location from immediately above the saturated soil (i.e., the capillary fringe); and
    - One groundwater sample from each soil boring, excavation, or dewatering well in which groundwater is encountered.

4. **Dewatering** – If dewatering is conducted to support excavation of potentially suitable fill material, characterization of the fill material must be conducted after dewatering has been implemented and soil is no longer saturated.

2.4. Screening Levels

To be considered suitable fill material, analytical results of the fill characterization sampling must be less than applicable environmental and human health risk based screening levels.

2.4.1. Default Screening Levels

ACDEH has adopted the Regional Water Board's Tier 1 Environmental Screening Levels dated February 2016 (ESLs) as default screening levels for all constituents with the following exception:

- **Arsenic**: the screening level for arsenic adopted by ACDEH is 11.00 milligrams of arsenic per kilogram of sample. This concentration based on the upper estimate (99th percentile) for regional background levels of arsenic in the urbanized San Francisco bay region[3].

The use of Tier 1 ESLs as a default screening level is applicable to all sites regardless of land use or other site characteristics.

2.4.2. Alternative Screening Levels

In the event that fill characterization fails the default screening levels, alternative screening levels may be proposed for consideration by ACDEH via submittal of a site-specific soil import management plan. The soil import management plan must include a site-specific risk assessment for the receiving location and associated supporting technical documents.

The use of hazardous waste characteristic of toxicity levels (California Code of Regulations Title 22 Section 66261.24) as a screening level to evaluate the suitability of the import of soils is unacceptable for all sites except for appropriately designed and permitted treatment, storage, disposal, or recycling facilities.

3. ACDEH FILL MATERIAL IMPORT SUITABILITY DETERMINATION PROCESS

To obtain a determination from ACDEH that a proposed fill material is suitable, ACDEH requires submittal of a technical report (the "Fill Material Characterization Report") documenting the characterization of the proposed fill material. This technical report must contain, at a minimum, the following element:

A. A cover letter from the owner of the proposed fill source material with the following statement: "I have read and acknowledge the content, recommendations, an/or conclusions contained in the attached document or report submitted on my behalf to ACDEH". This cover letter must be signed by the owner of the proposed fill source material or a legally authorized representative of the owner of the proposed fill source material;

B. A statement that fill material characterization was conducted under the responsible charge of a registered professional with licensure in the state of California. This statement must be accompanied by the signed and dated seal of the licensed registered professional with responsible charge;

C. Narrative identifying and summarizing the following elements:

    a. The location, assessor's parcel number, and physical address of the proposed fill material source area;

    b. A summary of historical land uses and operations conducted at and in the vicinity of the proposed fill material source area with citations for supporting documentation;

c. Identification and description of any identified RECs;

d. A summary of fill material characterization efforts conducted, including a description of sampling and analysis and applicable geology and hydrogeology within the proposed fill material source area;

e. A summary of the results of analytical sampling; and

f. Recommendations and conclusions for the suitability of proposed fill material.

D. Tables summarizing the site characterization analytical data;

E. A completed Proposed Fill Material Source Characterization Summary Form. A copy of this form is provided in pdf in Attachment A. An excel spreadsheet of this form is available on request;

F. Figure(s) depicting the following elements:

a. Sample locations;

b. Parcel lines and parcel numbers;

c. Lateral extent(s) and depth(s) of the proposed fill material source area(s);

d. Location of any identified RECs;

e. Location of known current and historic infrastructure including structures, roadways, utilities, and any above ground or below ground storage tanks.

G. Boring logs depicting the geology, sample depths, and any encountered groundwater from each sample location;

H. Copies of laboratory analytical data;

I. Copies of supporting environmental documents such as Phase I ESA, PEA, or historic subsurface investigation reports.

The Fill Material Characterization Report and supporting documentation must be submitted to ACDEH via email to deh.loptoxic@acgov.org and upload to the State Water Board's GeoTracker database. ACDEH will review the Fill Material Characterization Report and will issue a directive letter that (a) determines that the proposed fill material is suitable for import; (b) requests additional characterization; or (c) determines that the proposed fill material is not suitable for import. ACDEH's determination will include conditions described in Section 4 and may include additional conditions or requirements.

4. CONDITIONS OF ACDEH FILL MATERIAL IMPORT SUITABILITY DETERMINATION

As a condition of import, a technical report be submitted to ACDEH via email and uploaded to GeoTracker documenting the import of soil (the "Soil Import Summary Report"). The report must be uploaded to the GeoTracker information repositories for both the fill material source area and the destination. Please note that for locations importing soil from multiple sources, a single report can be submitted that documents import from multiple sources. For locations in which soil import activities last more than one year, a Soil Import Summary Report must be submitted on a semi-annual basis for the duration of import activities. The Soil Import Summary Report must contain the following elements at a minimum:

A. A cover letter from the owner of the proposed fill source material that states, at a minimum, the following: "I have read and acknowledge the content, recommendations, and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH." This cover letter must be signed by the

owner of the proposed fill source material or a legally authorized representative of the owner of the proposed fill source material;

B. The technical report must include a statement that fill material characterization was conducted under the responsible charge of a registered professional with licensure in the state of California. This statement must be accompanied by the signed and dated seal of the licensed registered professional with responsible charge;

C. Summary tables of soil import logs. These logs must include the following information for each delivery of fill material: arrival date, manifest number or truck tag, quantity of fill material delivered, originating facility, and profile number;

D. A figure depicting the location and depth of imported soil. If fill material from multiple sources has been imported, the location and depth of imported soil from each source must be distinguished;

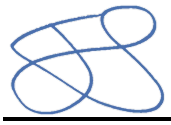
E. Copies of all manifests or other documentation of soil import as an appendix; and

F. Copies of all fill characterization profiles as an appendix.

5. CLOSING

If you have questions or comments regarding the requirements and guidance presented in this document, please do not hesitate to contact ACDEH. This document was prepared by, or under the direction of, the undersigned.

Dilan Roe, P.E. C73703
Chief
Land Water Division



Jonathan Sanders
Senior Hazardous Materials Specialist
Local Oversight and Site Cleanup Program

ENCLOSURES

Tables

Table 1a	Minimum Required Analyses for Characterization of Fill Material for Off-Site Reuse for Receiving Facilities Located outside of Zone 7 Water Agency Jurisdictional Boundaries
Table 1b	Minimum Required Analyses for Characterization of Fill Material for Off-Site Reuse for Receiving Facilities Located within Zone 7 Water Agency Jurisdictional Boundaries
Table 2a	Minimum Required Sample Density and Spacing for In Situ (Pre-excavation) Characterization of Proposed Fill Material Sources for Receiving Facilities Located outside of Zone 7 Water Agency's Jurisdictional Boundaries
Table 2b	Minimum Required Sample Density and Spacing for In Situ (Pre-excavation) Characterization of Proposed Fill Material Sources for Receiving Facilities Located within Zone 7 Water Agency's Jurisdictional Boundaries
Table 3	Minimum Required Sample Density and Spacing for Stockpile (Post-Excavation) Characterization of Proposed Fill Material Sources

Appendices

Appendix A	Proposed Fill Material Source Characterization Summary Form

REFERENCES

1. DRAFT Technical Reference Document: Characterization and Reuse of Petroleum Hydrocarbon Impact Soil as Inert Waste. San Francisco Bay Regional Water Quality Control Board. October 2006.
2. Environmental Screening Levels (ESLs) revision 3. San Francisco Bay Regional Water Quality Control Board. February 2016.
3. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region. Duverge. December 2011
4. Information Advisory: Clean Imported Fill Material. Department of Toxic Substances Control (DTSC). October 2001.
5. Interim Guidance for Sampling Agricultural Properties revision 3. Department of Toxic Substances Control. August 7, 2008.
6. Preliminary Endangerment Assessment Guidance Manual. Department of Toxic Substances Control. January 1994. Revised October 2015.

TABLES

Table 1a
Minimum Required Analyses for Characterization of Fill Material for Off-Site Reuse
for Receiving Facilities Located outside of Zone 7 Water Agency Jurisdictional Boundaries

		Current and Historic Land Use At or Within 500 Feet of Fill Source Area			Current and Historic Land Use at Parcel(s) Containing Fill Source Area			
Laboratory Analysis[1]	**Analytical Method**	Major Roadway or Freeway	Mining Area or Rock Quarry	Regulated Cleanup Site and RECs	Agricultural	Residential / Acceptable Commercial[2]	Existing Historic Engineered Fill[3]	Industrial / Unacceptable Commercial
California Title 22 Metals [4]	USEPA 6010B and/or USEPA 7471A	X (Lead Only)	X	Additional As Required	X	X	X[5]	N/A
Asbestos	PLM or OSHA 191		X (PLM)	Additional As Required		X (OSHA 191)	X[5]	N/A
pH	USEPA 9045D		X	Additional As Required			X[5]	N/A
Pesticides	USEPA 8141A; and USEPA 8151A; and USEPA 8081A or 8080A			Additional As Required	X		X[5]	N/A
VOCs	USEPA 8260B with collection by USEPA 5035			Additional As Required		X	X[5]	N/A
SVOCs & PAHs	USEPA 8270C SIM	X (PAHs Only)		Additional As Required		X	X[5]	N/A
TPH	USEPA 8015M	X[5]	X[5]	Additional As Required	X[5]	X	X[5]	N/A
PCBs	USEPA 8082 or 8080A			Additional As Required		X	X[5]	N/A

Adapted from Department of Toxic Substances Control's Information Advisory Clean Imported Fill Material dated October 2001.

Notes:

(1) All analysis should be performed in accordance with USEPA SW-846 methods. A standard laboratory data package, including a summary of the QA/QC (Quality Assurance/Quality Control) sample results must accompany all analytical reports;
(2) Acceptable commercial land use excludes any commercial use that generates revenue from manufacturing, repair/restoration, maintenance/cleaning, or the storage/transport of hazardous materials;
(3) Existing homogeneous engineered fill. Fill containing waste or debris or that is heterogeneous is not acceptable for off-site reuse.
(4) Include when Hexavalent Chromium analysis required by USEPA method 7199
(5) Analysis required by Alameda County Department of Environmental Health;

Abbreviations:

USEPA -United States Environmental Protection Agency
N/A – Not Acceptable for off-site re-use
PLM – Polarized Light Microscopy
OSHA – Occupational Safety and Health Administration Testing Method Number
SIM – Selected Ion Monitoring
VOCs – Volatile Organic Compounds
SVOCs – Semi-Volatile Organic Compounds
PAHs – Poly Aromatic Hydrocarbons
TPH – Total Petroleum Hydrocarbons as reported for gasoline range, diesel range, and motor oil range
PCBs – Polychlorinated Biphenyls;

Table 1b
Minimum Required Analyses for Characterization of Fill Material for Off-Site Reuse for Receiving Facilities Located within Zone 7 Water Agency Jurisdictional Boundaries

		Current and Historic Land Use At or Within 500 Feet of Fill Source Area			Current and Historic Land Use at Parcel(s) Containing Fill Source Area			
Laboratory Analysis[1]	**Analytical Method**	Major Roadway or Freeway	Mining Area or Rock Quarry	Regulated Cleanup Site and RECs	Agricultural	Residential / Acceptable Commercial[2]	Existing Historic Engineered Fill[3]	Industrial / Unacceptable Commercial
California Title 22 Metals [4]	USEPA 6010B and/or USEPA 7471A	X (Lead Only)	X	Additional As Required	X	X	X[5, 6]	N/A
Asbestos	PLM or OSHA 191		X (PLM)	Additional As Required		X (OSHA 191)	X[5, 6]	N/A
pH	USEPA 9045D		X	Additional As Required			X[5, 6]	N/A
Pesticides	USEPA 8141A; and USEPA 8151A; and USEPA 8081A or 8080A	X[6]	X[6]	Additional As Required	X	X[6]	X[5, 6]	N/A
VOCs	USEPA 8260B with collection by USEPA 5035			Additional As Required		X	X[5, 6]	N/A
SVOCs & PAHs	USEPA 8270C SIM	X (PAHs Only)		Additional As Required		X	X[5, 6]	N/A
TPH	USEPA 8015M	X[5, 6]	X[5, 6]	Additional As Required	X[5, 6]	X	X[5, 6]	N/A
PCBs	USEPA 8082 or 8080A			Additional As Required		X	X[5, 6]	N/A

Adapted from Department of Toxic Substances Control's Information Advisory Clean Imported Fill Material dated October 2001.

Notes:

(1) All analysis should be performed in accordance with USEPA SW-846 methods. A standard laboratory data package, including a summary of the QA/QC (Quality Assurance/Quality Control) sample results must accompany all analytical reports;
(2) Acceptable commercial land use consist excludes any commercial use that generates revenue from manufacturing, repair/restoration, maintenance/cleaning, or the storage/transport of hazardous materials;
(3) Existing homogeneous engineered fill. Fill containing waste or debris or that is heterogeneous is not acceptable for off-site reuse.
(4) Include when Hexavalent Chromium analysis required by USEPA method 7199
(5) Analysis required by Alameda County Department of Environmental Health;
(6) Analysis required by Zone 7 Water Agency

Abbreviations:

USEPA -United States Environmental Protection Agency
N/A – Not Acceptable for off-site re-use
PLM – Polarized Light Microscopy
OSHA – Occupational Safety and Health Administration Testing Method Number
SIM – Selected Ion Monitoring
VOCs – Volatile Organic Compounds
SVOCs – Semi-Volatile Organic Compounds
PAHs – Poly Aromatic Hydrocarbons
TPH – Total Petroleum Hydrocarbons as reported for gasoline range, diesel range, and motor oil range
PCBs – Polychlorinated Biphenyls;

Table 2a

Minimum Required Sample Density and Spacing for In Situ (Pre-excavation) Characterization of Proposed Fill Material Sources for Receiving Facilities Located outside of Zone 7 Water Agency's Jurisdictional Boundaries

Requirements	Size of Contiguous Fill Source	Minimum Lateral Sample Distribution	Minimum Vertical Sample Distribution
(1) Additional lateral sample locations may be required to address identified RECs; (2) Additional samples must be collected from fill material that exhibits signs of potential contamination (*e.g.*, strong odor, staining, presence of sheen or free product, stressed vegetation in the vicinity, elevated response from photo-ionization detector); (3) Fill source area cannot be located on parcel(s) with historic industrial or unacceptable commercial land uses or parcel(s) associated with regulated environmental cleanup sites unless approved by regulatory oversight agency; (4) Samples that are collected, but not planned for analysis must be submitted with the samples planned for analysis under chain of custody to an appropriately certified analytical laboratory. The samples that are not planned for analysis must remain on hold with the laboratory until ACDEH has issued a determination regarding the suitability of fill material for import and released the un-analyzed samples for disposal; (5) When contaminants associated with surface deposition (e.g. pesticides, asbestos, and lead) are required to be evaluated, ACDEH requires the following additional samples be collected from each sample location: One sample from 0 to 6 inches bgs, One sample from 6 inches to 2 feet bgs, One sample from 2 feet to 3 feet bgs. One of these samples must be selected for analysis for each sample location; (6) If groundwater is encountered, ACDEH requires the following additional samples be collected and analyzed: One sample per Sample Location from immediately above the saturated fill material (i.e., the capillary fringe); One groundwater samples must be collected and analyzed for each boring, excavation, or dewatering well in which groundwater is encountered. (7) If dewatering will be conducted to support excavation below an existing water table, ACDEH requires that, historically saturated fill material be samples after dewatering is in effect. (8) Composite sampling may or may not be appropriate, depending on the quality and homogeneity of the source/borrow area and compounds of concern.	≤2.0 acres	**4** sample locations. **AND** Sample Locations must be distributed throughout the fill material source area.	**1** sample collected and analyzed per sample location. **AND** **1** sample collected and analyzed for every 5 feet bgs. **AND** **1** sample collected from each layer exhibiting different geological characteristics or lithology encountered.
	≥2.0 acres <4.0 acres	**1** sample location per 0.5 acre. **AND** Sample Locations must be distributed throughout the fill material source area.	**1** sample collected and analyzed per sample location. **AND** **1** sample collected and analyzed for every 5 feet bgs. **AND** **1** sample collected from each layer exhibiting different geological characteristics or lithology encountered.
	≥4 acres <10.0 acres	**8** sample locations. **AND** Sample Locations must be distributed throughout the fill material source area.	**1** sample collected and analyzed per sample location. **AND** **1** sample collected and analyzed for every 5 feet bgs. **AND** **1** sample collected from each layer exhibiting different geological characteristics or lithology encountered.
	≥10.0 acres	**8** sample locations. **AND** Sample Locations must be distributed throughout the fill material source area.	**4** sample collected and analyzed per sample location. **AND** **1** sample collected and analyzed for every 5 feet bgs. **AND** **1** sample collected from each layer exhibiting different geological characteristics or lithology encountered.

Table 2b

Minimum Required Sample Density and Spacing for In Situ (Pre-excavation) Characterization of Proposed Fill Material Sources for Receiving Facilities Located within Zone 7 Water Agency's Jurisdictional Boundaries

Requirements	Size of Contiguous Fill Source	Minimum Lateral Sample Distribution	Minimum Vertical Sample Distribution
(1) Additional lateral sample locations may be required to address identified RECs (2) Additional samples must be collected from fill material that exhibits signs of potential contamination (*e.g.*, strong odor, staining, presence of sheen or free product, stressed vegetation in the vicinity, elevated response from photo-ionization detector) (3) Fill source area cannot be located on parcel(s) with historic industrial or unacceptable commercial land uses or parcel(s) associated with regulated environmental cleanup sites unless approved by regulatory oversight agency; (4) Samples that are collected, but not planned for analysis must be submitted with the samples planned for analysis under chain of custody to an appropriately certified analytical laboratory. The samples that are not planned for analysis must remain on hold with the laboratory until ACDEH has issued a determination regarding the suitability of fill material for import and released the un-analyzed samples for disposal; (5) When contaminants associated with surface deposition (e.g. pesticides, asbestos, and lead) are required to be evaluated, ACDEH requires the following additional samples be collected from each sample location: One sample from 0 to 6 inches bgs; One sample from 6 inches to 2 feet bgs; and One sample from 2 feet to 3 feet bgs. One of these samples must be selected for analysis for each sample location; (6) If groundwater is encountered, ACDEH requires the following additional samples be collected and analyzed: One sample per Sample Location from immediately above the saturated fill material (i.e., the capillary fringe); One groundwater samples must be collected and analyzed for each boring, excavation, or dewatering well in which groundwater is encountered. (7) If dewatering will be conducted to support excavation below an existing water table, ACDEH requires that, historically saturated fill material be samples after dewatering is in effect. (8) Composite sampling may or may not be appropriate, depending on the quality and homogeneity of the fill material and compounds of concern.	≤2.0 acres	**8** sample locations. **AND** Sample Locations must be distributed throughout the fill material source area.	**1** sample collected and analyzed per sample location. **AND** **1** sample collected and analyzed for every 5 feet bgs. **AND** **1** sample collected from each layer exhibiting different geological characteristics or lithology encountered.
	≥2.0 acres <4.0 acres	**1** sample location per 0.25 acre. **AND** Sample Locations must be distributed throughout the fill material source area.	**1** sample collected and analyzed per sample location. **AND** **1** sample collected and analyzed for every 5 feet bgs. **AND** **1** sample collected from each layer exhibiting different geological characteristics or lithology encountered.
	≥4 acres <10.0 acres	**16** sample locations. **AND** Sample Locations must be distributed throughout the fill material source area.	**1** sample collected and analyzed per sample location. **AND** **1** sample collected and analyzed for every 5 feet bgs. **AND** **1** sample collected from each layer exhibiting different geological characteristics or lithology encountered.
	≥10.0 acres	**16** sample locations. **AND** Sample Locations must be distributed throughout the fill material source area.	**4** sample collected and analyzed per sample location. **AND** **1** sample collected and analyzed for every 5 feet bgs. **AND** **1** sample collected from each layer exhibiting different geological characteristics or lithology encountered.

Table 3

Minimum Required Sample Density and Spacing for Stockpile (Post-Excavation) Characterization of Proposed Fill Material Sources for Receiving Facilities

Requirements	Size of Fill Source	Minimum Number of Fill Material Samples to be Collected
(1) Top Soil (0 to 6 inches bgs) and near surface soil (6 inches to 3 feet bgs) must be stockpiled separately if sampling for contaminants associated with surface deposition (e.g. pesticides, asbestos, and lead) (0-6 inches below ground surface) is required; (2) 4-point composite samples may be used in lieu of discrete samples for analysis other than VOCs and SVOCs, however, the total number of samples must be preserved; (3) VOC and SVOC samples are to be collected from fill material at least 1 foot into the stockpile;	$\leq$1,000 yd^3	**1** sample collected and analyzed per 250 cubic yards of stockpiled fill material.
	>1,000 yd^3 & <5,000 yd^3	**4** samples collected and analyzed for first 1,000 cubic yards **AND** **1** sample for each additional 500 cubic yards.
	$\geq$5,000 yd^3	**12** samples collected and analyzed for first 5,000 cubic yards **AND** **1** sample for each additional 1,000 cubic yards.

ATTACHMENT A

Proposed Fill Material Source Characterization Summary Form

Proposed Fill Material Source Characterization Summary Form

Assoicated APN	Historic Land Use and identification of RECs (check all that apply)											In-situ [e.g. Unexcavated] Fill Source Information (if applicable)					Stockpiled Fill Source Information (if applicable)		Fill Source Classification (check all that apply)					Fill Type (check all that apply)					Fill Destination (check all that apply)				Minimum Required Sampling[4]/ Actual Number of samples collected								
	Phase 1 ESA or PEA Conducted	Undeveloped	Agricultural	Residential	Acceptable Commercial [1]	Unacceptable Commercial [2]	Industrial	Existing Historic Fill	Regulated Environmental Cleanup Site [3]	Major Roadway / Freeway [3]	Mining Area or Rock Quarry [3]	Cell ID	Excavation Width (feet)	Excavation Length (feet)	Excavation Depth (feet)	Number of Soil Layers Identified	Stockpile ID	Stockpile Volume (yd^3)	Soil Pit	Quarry	Construction Site	Stockpile Yard	Recycling Facility	Soil	Aggregate (sand and/or gravel)	Crushed Asphalt	Crushed Concrete	Construction Debris	Unknown	Property within jurisdiction of Zone 7	Property within jurisdiction of ACWD	Poperty outside Zone 7 or ACWD jurisdiction	Permitted TSDF	California Title 22 Metals	Asbestos	pH	Pesticides	VOCs	SVOCs	PAHs	TPH	PCBs
																																		/	/	/	/	/	/	/	/	/
																																		/	/	/	/	/	/	/	/	/
																																		/	/	/	/	/	/	/	/	/
																																		/	/	/	/	/	/	/	/	/
																																		/	/	/	/	/	/	/	/	/
																																		/	/	/	/	/	/	/	/	/
																																		/	/	/	/	/	/	/	/	/
																																		/	/	/	/	/	/	/	/	/
																																		/	/	/	/	/	/	/	/	/
																																		/	/	/	/	/	/	/	/	/

Are RECs, CRECs, or HRECs associated with any parcels? If so, what parcels, and what are the associated COCs?	
If Fill Source Area is a regulated environmental cleanup site, provide case identification information and regulatory oversight agency soil export requirements	

Notes:

(1)	Commercial activities that do not meet the Unacceptable Commercial critier. Typically, Acceptable Commercial facilities are retail, restaurants or service providers (professional, legal, integrated technology, ect.).
(2)	Commercial activities that generate revenue through or that significantly involve manufacturing, repairing, restoring, or providing maintenance services or the transport, storage, and disposal of hazardous materials.
(3)	Land use at, or within 500 feet of the parcel(s) containining the fill source
(4)	Does not include additional sampling that may be required by the regulatory oversight agency overseeing the environmental cleanup site where the fill source is located
*	Fill inappropriate or not proposed for off-site reuse at this time and must be disposed of at a permitted TSDF. Please consult with a permited TSDF for sampling requirements for acceptance by the TSDR.
ACWD	Alameda County Water District
APN	Assesors Parcel Number
AR	As required by accepting permitted TSDR
CRECs	Controlled Recognized Environmental Condition as defined in ASTM E1527-13
HREC	Historic Recognized Environmental Condition as defined in ASTM E1527-13
REC	Recognized Environmental Condition as defined in ASTM E1527-13
TSDF	Treatment, Storage, or Disposal Facility, deinfed as a "Designated Facility" inTitle 22, Section 66260.10 of the California Code of Regulations.
Zone 7	Zone 7 Water Agency