

**Project Description**  
**Yolo County Off-Channel Surface Mining Ordinance Amendment and**  
**Teichert Esparto Facility Mining Permit Modification (ZF# 95-094)**  
**July 2016**

**1.0 Introduction**

Teichert proposes to apply for text amendment to Section 10-4.412 of the Yolo County Off-Channel Surface Mining Ordinance (OCSMO) and for modifications to the mining permit for its existing Esparto aggregate mining and processing facility (ZF# 95-094) to allow for limited dewatering activities needed to continue surface mining operations on the site. As discussed in further detail below, the requested OCSMO and mining permit amendments are necessary to comply with the Correction Plan the County approved in April 2016 for the Esparto facility.

**2.0 Project Location and Setting**

Teichert's existing Esparto aggregate mining and processing facility is located at 27944 County Road 19A, near the town of Esparto in unincorporated Yolo County. The Esparto site consists of three parcels (APNs 048-210-006, -010, and -011) totaling approximately 289.74 acres. Surrounding land uses include agricultural uses to the west, north, and east, a rural residence (Mast) to the northeast, and Cache Creek and aggregate mining (Syar) to the south.

**3.0 OCSMO Dewatering Prohibition**

The Yolo County Off-Channel Surface Mining Ordinance (OCSMO) was adopted by the Yolo County Board of Supervisors in 1996 as part of the County's Off-Channel Mining Plan (OCMP). As part of the public review process for the County's Off-Channel Mining Plan (OCMP) in the mid 1990s, the County received a public comment concerning the effects of dewatering associated with aggregate mining operations. At that time, none of the four aggregate mining operators who elected to participate in the OCMP were proposing to dewater in conjunction with aggregate mining operations. Therefore, the County staff, in coordination with the participating aggregate producers, decided to prohibit dewatering rather than specifically analyzing the effects of allowing dewatering. Thus, the OCSMO, which implements the OCMP, was adopted with a prohibition on dewatering.

The OCSMO currently prohibits dewatering as a part of surface mining operations. That prohibition is found in Section 10-4.412 of the OCSMO, which provides:

Under no circumstances, shall any off-channel excavation use dewatering as a part of their surface mining operations.

“Dewatering” is not defined in the OCSMO. However, County staff has interpreted the term to mean lowering the water level in a wet pit by pumping water from the pit regardless of the purpose of the pumping. (Jeff Anderson, Letter of 8/17/15.)

#### **4.0 Description of Approved Project**

##### Existing Entitlements

Teichert’s existing Esparto aggregate mining and processing facility is located at 27944 County Road 19A, near the town of Esparto in unincorporated Yolo County. The Esparto site consists of three parcels (APNs 048-210-006, -010, and -011) totaling approximately 289.74 acres. The Esparto Plant and associated Reiff and Mast mining sites are regulated by Mining Permit and Reclamation Plan No. ZF# 95-094 and Development Agreement #96-290, which were approved by the County in 1996. The 1996 entitlements allow for off-channel mining on approximately 148 acres (Mast and Reiff properties) over a 30-year period, with reclamation to permanent lakes and habitat. The Esparto plant has an annual production limitation of 1,000,000 tons sold and 1,176,471 tons mined. (ZF# 95-094, Condition 2.) These entitlements expire in January 2028.

##### Environmental Analysis

An environmental impact report (EIR) for the Teichert Esparto mining and reclamation project was prepared and certified by Yolo County in 1996 for the purposes of compliance with the California Environmental Quality Act (CEQA). The EIR analyzed the impacts of mining and reclaiming the Mast and Reiff mining sites, aggregate processing at the Esparto Plant site, and off-site impacts associated with aggregate truck trips. The EIR assumed that aggregate wash water from the Esparto Plant would be discharged to sedimentation basins near the plant site. The EIR also noted that the water supply for the Esparto Plant processing and onsite dust suppression would be provided by an onsite well located in the northwest portion of the site (presumably on the Reiff site) and that two other wells are located on the plant site. The EIR assumed that total water use for the Esparto mining and reclamation operation would average 470 acre-feet per year.

#### **5.0 Onsite Water Use**

##### Operational History

Prior to 2004, aggregate wash water was discharged into a series of five settling ponds located within the 100-year floodplain of Cache Creek on the Esparto Plant site. Water in the settling ponds was recycled and pumped back to the Esparto Plant once sediments settled out. In addition, an onsite well located at the plant site provided make-up water to account for water lost to evaporation and retained in the processed aggregate.

In 2004, the Central Valley Regional Water Quality Control Board (RWQCB) approved revised Waste Discharge Requirements (WDRs) for the Esparto Plant. The revised WDRs moved the designated wash water discharge location for the Esparto Plant to the active mining area, including Reiff and Mast mining sites, and prohibited further discharges to the settling ponds or elsewhere within the 100-year floodplain. The RWQCB determined that the impacts of this change in discharge location was adequately addressed by the existing 1996 Esparto EIR and, thus, no further environmental documentation was required to comply with CEQA.

Pursuant to the revised WDRs, Teichert began discharging aggregate wash water from the Esparto Plant to the Reiff mining pit in 2004. As part of this process, water was recycled in the Reiff pit and pumped back to the Esparto Plant once sediments were allowed to settle out. Teichert was unaware that the pumping of water from the Reiff pit constituted “dewatering” under the OCSMO, because no offsite discharge or lowering of offsite groundwater levels was occurring in this case.

Beginning in 2013 or 2014, pumping water from the Reiff pit to the Esparto Plant became a challenge as a result of the drought and its effects on groundwater elevations. In order to supply make-up water for the Esparto Plant, Teichert began to pump water from the Mast pond to the Reiff pond. Aggregate wash water from the Esparto Plant continued to be discharged to the Reiff pond and recycled for re-use at the plant.

### Current Operations

Current operations at the Esparto Plant include active mining on the Mast property. Aggregate wash water is discharged to and recycled in the Reiff pond. Water from the Mast pond is pumped into the Reiff pond to provide make-up water for the Esparto Plant.

## **6.0 County Administrative Action**

### County Administrative Policy for Off-Channel Surface Mining and Reclamation Process

In June 2014, the Planning Commission directed County staff to examine ways to address compliance issues associated with off-channel surface mining and reclamation operations. Based on that direction, County staff developed an Administrative Policy that outlined a procedure to document potential violations of SMARA, OCSMO, SMRO, or any terms or conditions of a surface mining permit or reclamation plan and to address issues of non-compliance that do not rise to the level of a violation (i.e., non-SMARA issues where there is no imminent and substantial endangerment to public health, safety, or the environment). The Administrative Policy was reviewed by County Counsel and agreed upon by all mining operators.

Under the Administrative Policy, if County staff determines that, if a potential violation of the OCSMO, SMRO, or any terms or conditions of a surface mining permit or reclamation plan exists, but there is not an imminent and substantial endangerment to

the public health, safety, or environment, the operator shall submit a Correction Plan for review and approval by the County. The Correction Plan must describe in detail the sequence, methods, and timeline necessary to correct the conditions of concern identified by County staff. Once a Correction Plan has been reviewed, revised (if necessary), and finalized, the County staff shall forward the finalized Correction Plan to the Planning Commission as an informational item.

#### Teichert Esparto Administrative Action

In August 2015, County staff notified Teichert that it considered Teichert's activities of pumping water from the Reiff and Mast ponds to be "dewatering" that is prohibited under Section 10-4.412 of the OCSMO. The County indicated that it had identified a "condition of concern" associated with such activities that required the submittal of a Correction Plan by Teichert.

As required under the Administrative Policy, Teichert submitted a draft Correction Plan for the County's review in November 2015. The Correction Plan proposed that Teichert apply for an amendment to Section 10-4.412 of the OCSMO to allow for dewatering under specified circumstances that do not result in adverse impacts to groundwater resources and, if such an amendment is approved, apply for an amendment of its existing mining permit to allow such dewatering. Teichert also submitted a technical report prepared by its hydrogeological consultant Luhdorff & Scalmanini Consulting Engineers (LSCE) that demonstrated that the current groundwater pumping activities at Teichert's Esparto Facility were not adversely affecting surrounding groundwater levels.

In March 2016, the Correction Plan was revised in accordance with comments and suggested changes by County staff and the County's hydrological consultant, Baseline Environmental Consulting (Baseline).

On April 5, 2016, the County accepted the revised Correction Plan and determined that the current groundwater pumping at Teichert's Esparto facility did not constitute an "imminent and substantial endangerment to public health, safety, or environment," but would remain a condition of concern until the Correction Plan has been fully completed.

On May 12, 2016, County staff forwarded the Correction Plan to the Planning Commission as an informational/correspondence item, as required under the Administrative Policy.

#### **7.0 Project Objectives**

Teichert has identified the following objectives for the Project:

- To fulfill Teichert's obligations outlined in the Esparto Correction Plan;

- To allow for the continuation of aggregate mining and processing operations at the Esparto Facility;
- To allow for continued discharge and recycling of aggregate wash water to and from the mining pit(s) in accordance with the WDRs for the Esparto Facility;
- To allow for the continued pumping of water from the mining pit(s) to the Esparto Plant as needed to continue aggregate mining and processing at the Esparto Facility;
- To allow for the continued pumping of water between mining pits as needed to continue aggregate mining and processing at the Esparto Facility; and
- To ensure that offsite groundwater and other water resources are not adversely affected by dewatering activities.

## 8.0 Proposed Project Revisions

The Project is proposed to fulfill Teichert's obligations under the approved Correction Plan for the Esparto Facility, which are as follows:

- 1) Within 90 days of approval of the Correction Plan, file an application consisting of an amendment to the OCSMO to allow dewatering activities on a site-specific basis for surface mining operators that can demonstrate that the proposed dewatering would not adversely affect the surrounding environment; and
- 2) Within 90 days of approval of the proposed OCSMO amendment, file an amendment to Mining Permit ZF# 95-094 to provide for specific conditions under which dewatering can occur at the Esparto Plant and associated Mast and Reiff mining sites.

These two amendments are discussed in further detail below.

### Proposed OCSMO Amendment

Teichert proposes for the Board of Supervisors to consider the following amendment to Section 10-4.412 of the OCSMO:

#### **Sec. 10-4.412. Dewatering prohibition**

“Dewatering” shall mean lowering the water level in a wet pit by pumping water from the pit, regardless of the purpose of the pumping. Water generated from dewatering activities must be beneficially used or discharged on-site. This ordinance does not permit water generated from dewatering activities to be used or discharged off-site. Under no circumstances, shall any No off-channel excavation shall use dewatering as a part of their surface mining operations, unless site-specific technical analysis performed by a qualified Professional Engineer or Professional Geologist with experience in hydrogeology demonstrates that the proposed dewatering will not adversely affect off-site wells with respect to

groundwater level and quality. The Professional Engineer or Professional Geologist shall demonstrate, using appropriate hydrogeologic analysis (i.e., using data-supported empirical, analytical, and/or numerical investigative tools), that the proposed dewatering activity will not adversely impact active off-site wells or other water resources (e.g., creeks and wetlands) within 1,000 feet of the proposed dewatering pit boundary. Average historic low groundwater levels in the subject well, shall be used for the analysis. Site-specific aquifer testing shall be conducted, if needed, to determine aquifer properties for the analysis. Consistent with the OCMP EIR, an effect shall be considered adverse if the reduction in simulated groundwater levels exceeds two feet at any well located within 1,000 feet of the pit boundary or results in well failure.

The hydrogeologic analysis shall be submitted to the County for review and approval prior to implementation of any dewatering activities. If an adverse impact is identified by the analysis (either impacts to existing wells or other water resources, including creeks and wetlands), dewatering activities will be modified to eliminate any adverse impacts, and/or the applicant shall otherwise mitigate adverse impacts to the satisfaction of the County.

Prior to and for the duration of dewatering activities, the applicant shall: 1) monitor water levels in the wet pit(s), and nearby monitoring wells on a quarterly basis; and 2) quantify the amount of water pumped from and returned to the wet pit(s). This monitoring data shall be reviewed by the applicant's Professional Engineer or Professional Geologist to determine whether any adverse impacts are occurring. Documentation of the monitoring and data evaluation shall be submitted the County annually. If adverse impacts are found to be occurring, dewatering activities will be modified to eliminate adverse impacts, or the applicant shall otherwise mitigate impacts to the satisfaction of the County. Any measures designed to mitigate adverse impacts identified after implementation of dewatering activities shall be approved by the Planning Commission at a regularly scheduled meeting, with written notice of the adverse impact and proposed mitigation measures given by mail to all property owners within 1,000 feet of the pit boundary in addition to any notice otherwise required by law.

For purposes of this section, mitigation measures of adverse impacts may include, but are not limited to, well modification, well relocation, compensation of well owners for increased pumping cost, or providing an alternative water supply. Such mitigation measures shall be paid for by the mining operator, with sufficient financial security to ensure completion of the measures.

Pumping of water from the wet pit in lieu of pumping of groundwater from a well shall not require predictive impact analysis in addition to

analysis provided in the approved, site-specific CEQA document, unless the total annual water demand, as set forth in the CEQA document, is exceeded. This does not remove the requirement for monitoring and reporting activities described above.

The proposed OCSMO amendments would define “dewatering” to be consistent with the current County staff interpretation of the term. The proposed OCSMO amendment would also allow for surface mining operations to use dewatering if site-specific analysis prepared by a qualified Professional Engineer or Professional Geologist demonstrates that such dewatering would not result in offsite impacts to groundwater or other water resources. Also, the water from dewatering must be put to a beneficial use and cannot be discharged offsite. The volumes of groundwater pumped from wet pits must be recorded and reported to the County.

Under the proposed OCSMO amendments, monitoring of groundwater levels would be required to ensure that dewatering activities do not result in adverse effects to groundwater or other water resources. If monitoring reveals adverse effects on neighboring wells within 1,000 feet, dewatering activities must cease or measures will be implemented to ensure that impacts on affected wells are mitigated. Such mitigation may include well modification, well relocation, or compensation for increased pumping costs. Surrounding property owners would have notice and an opportunity to review and comment on proposed mitigation at a hearing to be held before the Planning Commission.

#### Proposed Amendment to Mining Permit ZF# 95-094

In conjunction with the proposed OCSMO amendment, Teichert has submitted an application for an amendment to Mining Permit ZF# 95-094 to provide for specific conditions under which dewatering can occur at the Esparto Plant and associated Mast and Reiff mining sites. These conditions would include the following, subject to County review and approval:

- Net annual water use shall not exceed the 470 acre-feet per year analyzed in the 1996 EIR.
- No offsite discharge of pumped groundwater shall occur.
- Onsite aggregate wash water shall continue to be discharged to the mining pit(s) in accordance with the approved WDRs for the Esparto Plant.
- Groundwater pumping rate from either Mast or Reiff pits shall not exceed the existing rate of 3500 gpm.
- Groundwater levels will be monitored quarterly.
- Groundwater pumping volumes will be recorded.

As required under the proposed amendment to Section 10-4.412 of the OCSMO, Teichert will monitor water levels in the wet pit(s), and nearby monitoring wells on a quarterly basis and will quantify the amount of water pumped from and returned to the wet pit(s).

## **8.0 Project Justification**

The proposed OCSMO amendment and mining permit modification would fulfill Teichert's obligations under the approved Correction Plan for its Esparto Facility. Moreover, the project would allow Teichert to continue to operate its Esparto Facility in a manner that would allow for the recycling and reuse of aggregate wash water while protecting groundwater and other water resources in the project vicinity.