

Data Reporting

All data collected will be entered into GS30's computer program for data management, analysis and reporting. In addition, hard copies of the original data collected, including field notes for Petroflag testing, original laboratory data sheets, and Clean Soil Acceptance Agreements, will be kept at the Franklin Ridge Sand and Gravel site for review during inspections by any regulatory agencies. Records will be kept on site for a minimum of five years.

Quality Assurance/Quality Control (Verification Techniques)

GS30 personnel responsible for accepting fill at mine sites (weigh masters and order takers) will be trained to implement the Clean Fill Policy.

To verify the correlation of the Petroflag threshold with the laboratory analytical threshold, variability of sampling techniques, and to check for false negative results, one sample per month with a Petroflag TPH value of less than 200mg/kg should be sent to the analytical laboratory for confirmatory analysis.

Approximately one duplicate sample per 20 should be analyzed using the Petroflag screening technique. After the initial sampling phase, a duplicate laboratory analytical sample may be submitted at a frequency of one per 20 samples at GS30's discretion.

Laboratory analytical data sheets should be reviewed upon receipt to verify adherence with lab QA/QC guidelines, including review of blanks, control samples, surrogates, matrix spike and duplicates.

Operator Response

GS30 will develop a staging area for loads pending laboratory confirmation testing and suspect loads. GS30 personnel will immediately reject loads with obvious contamination or from questionable or uncertain sources. The staging area will be impervious and contained to prevent possible release of contaminants to storm water or the ground.

Other Requirements

The Washington MTCA requires that a confirmed release of hazardous substances to soil or groundwater be reported by the owner to the state Department of Ecology. If GS30's Petroflag and confirmatory testing indicate soil may have been subject to a release of hazardous substances, GS30 will notify the owner of the fill source with the results. GS30 is not required to report a release that is not on their property or within their control.

- Filling operations shall not begin until a signed and delivered Soil Acceptance Agreement has been submitted. The Agreement document shall remain on file with GS30 for review by King County for the project duration;
- The contractor will visually inspect all fill material during excavation and material unloading;
- A detailed Import Fill Material Summary shall be maintained during all filling activities. This shall include the date, contractor/transporter, job number, fill site location, truck count, fill quantity, material type, visual inspection verification and general remarks. This summary shall be submitted on a monthly basis to King County Department of Permitting and Environmental Review as required;

Sample Collection Techniques

Samples used to establish the concentration of TPH-D should consist of a composite of soil obtained from at least two grabs representative of a given load of fill designated for sampling. The grab sample soil should be mixed thoroughly in a stainless steel bowl with a stainless steel spoon. Sampling equipment should be cleaned with Liquinox (or equivalent) and triple-rinse with distilled water prior to use. The resulting composite soil sample should be immediately split into two aliquots: one for Petroflag screening and one for chemical analysis, if necessary. The rate at which chemical analysis are performed will be established by the initial sampling results by avoiding rocks, organic matter such as wood or sticks, but the presence of these materials should be noted in the sampling documentation. Petroflag screening should be performed within one hour of sample collection. The sample should be stored securely in clean, air tight jars and preserved by cooling to 40 degrees F. Preserved samples should be analyzed within 48 hours of sample collection. Soil used in the Petro flag test should be placed back on the same load after testing. Any samples to be analyzed at the laboratory will be placed in an ice-filled cooler and delivered, along with a chain-of-custody, to the laboratory.

Frequency of Monitoring

The frequency of sampling depends on the rate at which fill is accepted. Based on the studies conducted to develop the Clean Fill Policy, an estimated fill rate between 20,000 and 30,000 cubic yards per month requires five samples of fill obtained every two weeks, resulting in an annual sampling frequency of 0.5 to 0.8 percent of fill loads tested. The samples may be batched and collected on any day during the two weeks to allow for fluctuations of truck traffic and schedule. GS30 may choose to collect fewer than five samples every two weeks if fill rates are less and more than five samples if fill rates are more than rates above.

To increase the probability of detecting TPH in the fill, the samples should be collected from at least three different project sites (sources of material). Increasing the number of project sites from which samples are collected can increase the statistical coverage of material, increasing the probability of capturing random variability in materials.

FRANKLIN RIDGE CLEAN FILL MONITORING PROGRAM

Definition of Clean Fill

GS30 will designate "Clean Fill" first based on completion of a Clean Soil Acceptance Agreement (see Attachment A) by the fill source owner followed by testing of randomly selected backfill loads. A threshold value of 200 mg/kg TPH as diesel is used to define clean fill. Soil with TPH as diesel concentrations greater than 200mg/kg, or with visible evidence of contamination will be rejected for use as fill. TPH-D concentrations in a load may be established using standard laboratory analytical techniques (NWTPH-D or equivalent) or Petroflag screening results if laboratory confirmation quality control criteria are met.

Clean Fill will meet the limitations of King County's Grading Permit and will be consistent with King County Code. Those conditions include:

- Fill material shall consist of earthen material, organic material or recycled or reprocessed materials that are not categorized as dangerous waste under Title 173 WAC and that were produced originally from an earthen or organic material;
- Fill material shall have a maximum dimension of less than twelve inches;
- Recycled concrete shall be free of rebar and other materials that may pose a safety or health hazard;
- Recycled asphalt shall not be used in areas subject to exposure to seasonal or continual perched ground water, in a critical aquifer recharge area or over a sole-source aquifer; and
- Recycled materials that have not been reprocessed to meet the definition of common borrow shall be intermixed with well-graded, natural, earthen materials in sufficient quantities and of a suitable size to assure filling of all voids and to assure that the fill can be compacted.

Critical Data Elements

Critical data elements required to implement the backfill plan for the Franklin Ridge Sand and Gravel Operation include the following:

- Prior to filling activities, all potential contractors/transporters are required to submit a completed standard Soil Acceptance Agreement as provided by GS30;
- As outlined in this agreement, the specific address for the fill material source, number of cubic yards and contractor/transporter identification information must be provided;

The Clean Soil Acceptance Agreement states that only clean inert material is accepted for use as fill. Soil analyses with TPH as diesel concentrations greater than 200 mg/kg, or with visible evidence of contamination, is rejected for use as fill. The TPH-D threshold is based on the quantification limits for TPH in soil using field analytical screening equipment (Petroflag) and well below Washington Model Toxics Control Act (MTCA) Method A cleanup level for diesel-range hydrocarbons in soil of 1,000 mg/kg.

The clean fill Policy is based on studies conducted on fill brought to Cadman's Black Diamond, Redmond, and Sky River facilities in 1998 and 1999. In these studies, Cadman evaluated three potential sampling schemes to develop a random, systematic method for evaluating the characteristics of the material received at the Cadman sites. The objectives of the evaluation were as follows:

- To characterize the typical level of TPH-D in soil received at each of the three facilities;
- To develop a random, systematic and statistical method of verifying adherence to the Clean Soil Acceptance Agreement;
- To evaluate the relationship between field screening analysis for TPH-D and laboratory analysis of TPH-D;
- To refine the sampling scheme for future Clean Fill Policy testing; and,
- To select an appropriate threshold TPH concentration for laboratory testing and/or rejecting fill material returned to Cadman's facilities.

Based on the results of the testing conducted in 1998 and 1999, Cadman developed sampling techniques that they have used to implement their Clean Fill Policy at all of their sites accepting backfill material. These techniques form the basis of the GS30's Clean Fill Monitoring Program. This plan includes techniques that are easily implemented by mine personnel and that have been shown to produce reliable results that are representative and statistically significant. Therefore, GS30 has adopted this plan.

Franklin Ridge Clean Fill Monitoring Program

Introduction and Purpose

Green Section 30 LLC (GS30) is required to implement a clean fill monitoring program for their Franklin Ridge Sand and Gravel Operation. This plan has been developed to meet permit requirements for the mine by King County Department of Permitting and Environmental Regulation and Washington State Department of Natural Resources (DNR) as follows:

" ... Prior to importation of any fill (including fill berm construction) the operator shall develop a quality control and a Clean Fill Monitoring program to ensure compliance with this condition. Minimum plan design will determine critical data elements, data collection techniques, frequency of monitoring, data reporting, verification techniques to assure material is not contaminated, definition of clean fill, required operator response to illegal fill and any other information or data necessary to comply with federal, state and local regulations and mitigation conditions of this threshold determination necessary to prevent significant environmental impact." *King County Grading/Clearing Plan Review Approval Conditions (March 10, 2003), Reclamation, Condition 27.*

" ... The Department must approve a backfill plan prior to the importation of any backfill material or topsoil for use in reclamation. Imported backfill material must be free of hazardous substances and must constitute stable earth/mineral material." *DNR Surface Mining and Reclamation Permit No. 70-012688 Condition 7*

This plan is intended to satisfy these conditions.

Background Source

GS30 adopted a Clean Fill Policy for acceptance of clean fill at their mine site for use in reclamation. A copy of GS30's current Clean Soil Acceptance Agreement, required to be completed prior to acceptance of any backfill material at mine sites, is included as Attachment A to this plan. GS30 will also conduct random testing of fill material for quality control purposes. The testing consists of statistically random field analytical screening and confirmation chemical analytical testing for the presence of total petroleum hydrocarbons as diesel (TPH-D). TPH-D was selected as a surrogate for all potential contaminants because it is the most common contaminant found in fill soil and because field-screening methods for the contaminant readily correlate with laboratory results and are commonly available. Visual and olfactory screening to identify possible hydrocarbon contamination is also conducted on the material. The objective of the testing is to evaluate incoming backfill material for the presence of contaminants and verify adherence to the Clean Soil Acceptance Agreement.

Clean Soil Acceptance Agreement

Before Green Section 30, LLC (GS30) will accept any material for deposit on property owned by GS30, this agreement must be executed. GS30 requires that this agreement be executed by an owner or officer of your firm (the Company).

By signing this agreement, the signatory certifies that all material delivered to GS30 in clean virgin soil, FREE of any contaminates, which does not contain radioactive wastes, dangerous or extremely hazardous wastes (as defined by WAC 173-303), hazardous substances (as defined in WAC 173-340), petroleum waste, wood waste, any other solid waste, including but not limited to rubbish, ashes, or materials which are not the primary products of public, private, industrial, agricultural, commercial or mining operations, or any material regulated by federal, state or local environmental laws.

GS30 reserves the right to inspect, sample and/or require the Company to sample any and all material before accepting the material. This right does not relieve the Company of its responsibility to tender only clean soil as defined in the preceding rejected material is the sole responsibility of the Company. If, after acceptance, the material is discovered not to be clean soil, GS30 will notify the Company. If requested, the Company must remove the material within 48 hours of notification.

Upon delivery of the clean soil, the Company's driver, trucking contractor, carrier or other authorized representative shall sign a GS30 log sheet which indicates the date, location or source of the clean soil, the job number, a brief soil description, the cubic yards or tonnage, the truck number, GS30's ticket number if applicable and the charge per cubic yard, ton or truckload. GS30 reserves the right to refuse any load of clean soil for any reason. Disposal fee charges for clean soil may vary depending on the nature of the soil, the moisture content, material consistency, clay content, presence of wood, branches or other unwanted debris.

The Company agrees to defend, indemnify, and hold GS30 harmless from and against any and all claims, demands, causes of action, damages, liabilities, losses, expenses, penalties and all costs of defense relative thereto, including legal fees, caused by or resulting from the Company's breach of this agreement, specifically including any breach of the Company's obligation to deliver only clean soil.

Owner/ Officer

_____ Signature	_____ Company
_____ Print Name	_____ Address
_____ Title	_____ City, State, Zip
_____ Date	_____ Phone Number