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| 矿产资源绿色开发利用方案（三合一）信息表   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **一、矿权基本信息** | | | | | | | | | | | | | | | | | | | | | | | | | | 采/探矿权人 | | | | | | 贵州遵顺矿业有限公司 | | | | | | | | | | | | | | | | | | | | 矿山名称 | | | | | | 平坝区乐平镇小屯村白岩冲白云岩矿 | | | | | | | | | | | | | | | | | | | | 采/探矿许可证号 | | | | | | —— | | | | | | | | | | | | | | | | | | | | 开采矿种 | | | | | | 建筑用白云岩 | | | | | 开采方式 | | | | | 露天开采 | | | | | | | | | | 开拓方式 | | | | | | 公路运输开拓 | | | | | 采矿方法 | | | | | 自上而下台阶式开采 | | | | | | | | | | 生产规模 | | | | | | 20.0万m3/年 | | | | | 矿区面积（km2） | | | | | 0.0389 | | | | | | | | | | 有效期限 | | | | | | —— | | | | | | | | | | | | | | | | | | | | 发证机关 | | | | | | —— | | | | | 发证时间 | | | | | | | —— | | | | | | | | 开采深度 | | | | | | 由+1460m至+1335m标高 | | | | | | | | | | | | | | | | | | | | 拐点坐标（国家2000坐标系） | | | | | | 编号 X Y  1 2925738.093 35618451.735  2 2925631.028 35618418.311  3 2925620.752 35618434.335  4 2925582.353 35618400.653  5 2925572.788 35618407.046  6 2925547.958 35618549.427  7 2925519.403 35618594.497  8 2925401.028 35618303.311  9 2925666.028 35618328.311  10 2925646.028 35618383.311  11 2925734.463 35618410.109 | | | | | | | | | | | | | | | | | | | | 评审目的 | | | | | | ☑ 新立 □延续 □ 变更（根据实际情况选择“√”） | | | | | | | | | | | | | | | | | | | | **二、矿产资源开发利用** | | | | | | | | | | | | | | | | | | | | | | | | | | **（一）非煤矿山资源开发利用指标** | | | | | | | | | | | | | | | | | | | | | | | | | | 矿种名称 | | | | | | | 建筑用砂 | | | | 保有资源储量（万立方米） | | | | | | | | | 319.37 | | | | | | 设计利用资源储量（万立方米） | | | | | | | 138.01 | | | | 设计利用资源储量利用率（%） | | | | | | | | | 68 | | | | | | 设计可采储量 | | | | | | | 135.25 | | | | 开采回采率（%） | | | | | | | | | 98 | | | | | | 矿井水综合利用率（%） | | | | | | | / | | | |  | | | | | | | | |  | | | | | | **（二）煤炭资源开发利用指标** | | | | | | | | | | | | | | | | | | | | | | | | | | 矿种名称 | | | | | | | / | | | | 保有资源量（万吨） | | | | | | | | | / | | | | | | 设计利用资源量（万吨） | | | | | | | / | | | | 设计利用资源储量利用率（%） | | | | | | | | | / | | | | | | 设计可采储量（万吨） | | | | | | | / | | | | 薄煤层采区回采率（%） | | | | | | | | | / | | | | | | 煤矸石综合利用率（%） | | | | | | | / | | | | 中厚煤层采区回采率（%） | | | | | | | | | / | | | | | | 瓦斯抽采利用率（%） | | | | | | | / | | | | 矿井水综合利用率（%） | | | | | | | | | / | | | | | | **（三）非煤矿山采选指标** | | | | | | | | | | | | | | | | | | | | | | | | | | 矿石地质品位（%） | | | | | | | / | | | | 采出矿石品位（%） | | | | | | | | | / | | | | | | 设计选厂规模（万吨/年） | | | | | | | / | | | | 入选能力（万吨/年） | | | | | | | | | / | | | | | | 精矿产量（万吨/年） | | | | | | | / | | | | 精矿品位（%） | | | | | | | | | / | | | | | | 原矿入选品位（%） | | | | | | | / | | | | 尾矿品位（%） | | | | | | | | | / | | | | | | **（四）煤炭入洗指标** | | | | | | | | | | | | | | | | | | | | | | | | | | 原煤入洗率（%） | | | | | | | / | | | | 原煤年入洗能力（万吨/年） | | | | | | | | | / | | | | | | 入洗原煤灰分（%） | | | | | | | / | | | | 精煤年产量（万吨/年） | | | | | | | | | / | | | | | | 精煤灰分（%） | | | | | | | / | | | |  | | | | | | | | | / | | | | | | **（五）尾矿利用** | | | | | | | | | | | | | | | | | | | | | | | | | | 尾矿库容积（m3） | | | | | | | / | | | | 占地面积（hm2） | | | | | | | | | / | | | | | | 当年产生量（万吨） | | | | | | | / | | | | 当年利用量（万吨） | | | | | | | | | / | | | | | | 年末累计存量（万吨） | | | | | | | / | | | | 利用方式 | | | | | | | | | / | | | | | | **（六）废（矸）石利用** | | | | | | | | | | | | | | | | | | | | | | | | | | 废（矸）石场 | | | | | | | / | | | | 废（矸）石场占地面积（hm2） | | | | | | | | | / | | | | | | 当年产生量（万吨） | | | | | | | / | | | | 当年利用量（万吨） | | | | | | | | | / | | | | | | 年末累计存量（万吨） | | | | | | | / | | | | 利用方式 | | | | | | | | | / | | | | | | **（七）共（伴）生矿产利用** | | | | | | | | | | | | | | | | | | | | | | | | | | 可利用共（伴）生矿产（成分）名称 | | | | 设计指标 | | | | | | 生产实际指标 | | | | | | | | | | | | | | | | 入选品位（%） | | | 选矿回收率（%） | | | 入选矿石量（万吨/年） | | | | | | | 入选矿石品位（%） | | | | | 选矿回收率（%） | | | | / | | | | / | | | / | | | / | | | | | | | / | | | | | / | | | | **三、土地复垦** | | | | | | | | | | | | | | | | | | | | | | | | | | 土  地  利  用  现  状 | | 损毁前土地类型 | | | | | | | 工程类型使用土地（hm2） | | | | | | | | 其中 | | | | | | | | | 一级类 | | | | 二级类 | | | 采区 | 地面生产生活设施用地 | | | | 小计 | | | 已损毁  （hm2） | | | 拟损毁（hm2） | | | 占用 | 合计（hm2） | | 耕地 | | | | 水田 | | | / | / | | | | / | | | 0 | | | 0 | | | / | 0 | | 旱地 | | | / | / | | | | / | | | 0.6505 | | | 0.0043 | | | / | 0.6548 | | 林地 | | | | 乔木林地 | | | / | / | | | | / | | | 0.8925 | | | 0.3438 | | | / | 1.2363 | | 灌木林地 | | | / | / | | | | / | | | 0.6802 | | | 0.2126 | | | / | 0.8928 | | 交通运输用地 | | | | 农村道路 | | | / | / | | | | / | | | 0.0643 | | | 0 | | | / | 0.0643 | | 工矿仓储用地 | | | | 采矿用地 | | | / | / | | | | / | | | 3.8394 | | | 0 | | | / | 3.8394 | | 合 计 | | | | | | | / | / | | | | / | | | 6.1269 | | | 0.5607 | | | / | 6.6876 | | 用地损毁类型 | | 工程类型 | | | | | | | 面积（hm2） | | | | | | | | 其中 | | | | | | | | | 损毁 | 塌陷 | 压占 | | | 小计 | | | 已损毁  （hm2） | | | 拟损毁（hm2） | | | 占用 | 小计 | | 开采区 | | | | | | | 4.6985 | / | / | | | 4.6985 | | | 4.1378 | | | 0.5607 | | | / | 4.6985 | | 地面生产生活设施用地 | | | | | | | / | / | 1.9891 | | | 1.9891 | | | 1.9891 | | | / | | | / | 1.9891 | | 合计 | | | | | | | 4.6985 | / | 1.9891 | | | 6.6876 | | | 6.1269 | | | 0.5607 | | | / | 6.6876 | | 复垦后土地利用现状 | | 拟复垦土地类型 | | | | | | | 项目类型占地面积（hm2） | | | | | | | | | | | | | | | | | 一级类 | | | | 二级类 | | | 采区 | 地面生产生活设施用地 | | | | | | | 合 计 | | | | | | | | | 耕地 | | | | 旱地 | | | 0.5261 | 0.1287 | | | | | | | 0.6548 | | | | | | | | | 林地 | | | | 乔木林地 | | | 1.2363 | 0 | | | | | | | 1.2363 | | | | | | | | | 灌木林地 | | | 0.7775 | 0.1153 | | | | | | | 0.8928 | | | | | | | | | 交通运输用地 | | | | 农村道路 | | | 0 | 0.0643 | | | | | | | 0.0643 | | | | | | | | | 工矿仓储 用地 | | | | 采矿用地 | | | 2.1586 | 1.6808 | | | | | | | 3.8394 | | | | | | | | | 合计 | | | | | | | 4.6985 | 1.9891 | | | | | | | 6.6876 | | | | | | | | | 复垦工程施工费用估算（万元） | | | | | | | 117.13 | | | | | | | | | | | | | | | | | 土  地  复  垦  实  施  情  况 | | 复垦区面积（hm2） | | | | | | | 6.6876 | | | | | | | | | | | | | | | | | 地面生产生活设施用地（hm2） | | | | | | | 1.9891 | 永久性用地（hm2） | | | 0 | | | | 已塌陷损毁土地面积（hm2） | | | | | | 4.1378 | | | 复垦区预测塌陷损毁土地面积（hm2） | | | | | | | 0.5607 | | | 占用地面积（%） | | | | | | | | 8.38 | | | | | | 复垦区土地复垦面积  （hm2） | | | | | | | 6.6876 | | | 占用地面积（%） | | | | | | | | 100.00 | | | | | |  | | | | | | 土地复垦实施计划 | | | | | | | | | | | | | | | | | | | | 第一复垦区 | | 表土剥离、清理需要复垦的采区、平整场地土壤回填，栽种爬山虎、乔木、灌木、播撒草种等及后期管护及监测。 | | | | | | | | | | | | | | | | | | 第二复垦区 | | 清理采区及台阶、拆除工业场地建筑物、平整场地、覆土，种植灌木及后期管护及监测。 | | | | | | | | | | | | | | | | | | 土地复垦静态投资估算（万元） | | 143.91 | | | | 平均投资估算  （元/m2） | | | | | | | 21.52 | | | | | | | 土地复垦动态投资估算（万元） | | 151.11 | | | | 平均投资估算  （元/m2） | | | | | | | 22.60 | | | | | | | 拟采取复垦方式 | | 🗹矿山企业自行复垦 □委托中介机构复垦 | | | | | | | | | | | | | | | | | | **四、矿山地质环境修复治理** | | | | | | | | | | | | | | | | | | | | | | | | | | 现状调查情况 | | | 类型 | | | | 调查内容（发生时间、发生地点、规模、影响范围、体积、危害、发生原因、防治情况等） | | | | | | | | | | | | | | | | | | | 矿山地质灾害 | | | | 根据现场实地调查，评估区内未发现滑坡、崩塌（危岩）、泥石流、地面塌陷（岩溶塌陷、采空塌陷）、地裂缝、地面沉降等地质灾害。地质灾害危害程度小、危险性小。但由于矿山的开采，形成高陡边坡，局部存在松散块石，存在掉块、落石等安全隐患。 | | | | | | | | | | | | | | | | | | | 含水层破坏 | | | | 根据现场实地调查，矿山为生产矿山，开采面积为3.0511hm2，对含水层有一定破坏，但破坏较轻。 | | | | | | | | | | | | | | | | | | | 土地资源与植被损毁 | | | | 根据现场实地调查，矿山目前处于开采活动，基建工程早已完成，矿山基建和矿山开采对土地进行压占、开挖，导致土地受到破坏，其中旱地0.6505hm2、乔木林地0.8925hm2、灌木林地0.6802hm2、农村道路0.0643、采矿用地3.8394hm2，破坏土地严重，导致山体破损，基岩裸露。 | | | | | | | | | | | | | | | | | | | 地形地貌景观破坏 | | | | 根据现场调查，矿山开采区面积为3.0511hm2，对山体进行开挖，形成高都边坡，矿山开采对地形地貌景观破坏大。 | | | | | | | | | | | | | | | | | | | 地质环境影响预测 | | | | | | 矿山开采对地形地貌景观破坏程度大，防治难度大。 | | | | | | | | | | | | | | | | | | | | 矿山地质环境治理  恢复工程部署 | | | | | | 临时堆土场，采区底部修建排水沟，临时堆土场、高陡边坡顶部设置监测点，场区外沿修建防护网。 | | | | | | | | | | | | | | | | | | | | 分区 | | | 编号 | | | 位置 | | | | 面积(hm2) | | | | | 防治措施 | | | | | | | | | | | 重点防治区 | | | Ⅰ-1 | | | 采剥区 | | | | 4.1378 | | | | | ①严格按台阶（台阶高度：15m、台阶坡面角：75°、最终边坡角：61°）自上而下顺序开采；②固体废弃物合理有序堆放；③边开采边治理，及时恢复植被；④修筑排水、防水工程；⑤禁止顺向坡开采，雨季应停止作业；⑥建立监测预警点；⑦生产中应配备专门的边坡维护人员，对边坡进行监测，一旦发现边坡有不稳定因素，应立即组织人员利用机械设备清除隐患，确保边坡的稳定，保证生产安全；⑧开采结束后，要进行必要的护坡和支挡，结合覆土造林绿化措施，挂网客土喷播，植树种草加强采场边坡的稳定性。 | | | | | | | | | | | Ⅰ-2 | | | 工业广场、管理、生活区、生态区 | | | | 1.9891 | | | | | ①固体废弃物合理有序堆放；②对堆砂区要适时观察，发现不稳定因素要及时处理；③对各建筑物要适时观察，发现不稳定因素要及时处理；④矿山闭坑后，拆除地面建筑，平整场地，覆土恢复林地。 | | | | | | | | | | | 一般防治区 | | | Ⅲ | | | 除严重区（Ⅰ）之外的其他评估区域 | | | | 12.5795 | | | | | ①矿山在今后的生产和建设过程中，要予以重视，加以保护，避免损毁现有的土地资源及植被；②保持年度巡查，发现隐患及时处理。 | | | | | | | | | | | 治理恢复经费估算  （万元） | | | | | | 45.55 | | | | | | | | | 治理恢复基金账户余额（万元） | | | | |  | | | | | | 环 境  修 复  治 理  工 作  部 署  及 年  度 安  排 | | | | | | （1）矿山地质环境保护与恢复治理近期部署  ①对矿区实施动态监测。  ②针对建设初期形成的工业场地、切填方工程、地面构筑物及环境综合治理工程采取边建设边防治措施。  ③针对突发性地质灾害进行治理。  规划时间：2024年11月～2027年10月  （2）矿山地质环境保护与恢复治理中期部署  ①对矿区实施动态监测。  ②针对开采边坡、开采平台、边坡危岩体、水土流失、土地资源破坏等地质环境问题采取边开采边治理措施。  ③针对突发性地质灾害进行治理。  规划时间：2027年11月～2031年7月  （3）矿山地质环境保护与恢复治理远期部署（复垦期）  ①对矿区实施动态监测，监测挡土墙和边坡的稳定性。  ②各项治理工程的成效和地貌景观的恢复进行监测，对开采边坡、开采平台、工业场地开展复垦、绿化，对地质灾害采取治理措 施。  ③土地复垦、管护。  规划时间：规划时间：2031年8月～2033年7月  总之，矿山的环境保护与恢复治理是一个动态的过程，在矿山开采过程中要边开采、边保护、边治理。 | | | | | | | | | | | | | | | | | | | | **五、方案编制及评审信息** | | | | | | | | | | | | | | | | | | | | | | | | | | 编  制  单  位 | 单位名称 | | | | 贵州省地质矿产勘查开发局一一二地质大队 | | | | | | | | | | | | | | | | | | | | | 法人代表 | | | | 宋继伟 | | | 联系电话 | | | | | | | | | | | | | / | | | | | 主要  编制  人员 | | | | 姓 名 | | | 所在单位 | | 专业 | | | | | | | | | | | 技术职称 | | | | | 闵第杉 | | | 贵州省地质矿产勘查开发局一一二地质大队 | | 土地资源管理 | | | | | | | | | | | 高级工程师 | | | | | 韩家家 | | | 贵州省地质矿产勘查开发局一一二地质大队 | | 水文、工程、环境地质 | | | | | | | | | | | 高级工程师 | | | | | 罗云洪 | | | 贵州省地质矿产勘查开发局一一二地质大队 | | 水文、工程、环境地质 | | | | | | | | | | | 高级工程师 | | | | | 田衷珲 | | | 贵州省地质矿产勘查开发局一一二地质大队 | | 测绘工程 | | | | | | | | | | | 工程师 | | | | | 何腾跃 | | | 贵州省地质矿产勘查开发局一一二地质大队 | | 地质环境调查 | | | | | | | | | | | 助理工程师 | | | | | 张耘铭 | | | 贵州省地质矿产勘查开发局一一二地质大队 | | 生态修复 | | | | | | | | | | | 助理工程师 | | | | | 施学家 | | | 贵州省地质矿产勘查开发局一一二地质大队 | | 地质环境调查 | | | | | | | | | | | 助理工程师 | | | | | 周开晴 | | | 贵州省地质矿产勘查开发局一一二地质大队 | | 土地资源管理 | | | | | | | | | | | 助理工程师 | | | | | 评审专家组 | 组成 | | | | 姓 名 | | | 所在单位 | | 专业 | | | | | | | | | | | 技术职称 | | | | | 组长 | | | | 叶明亮 | | | 贵州大学 | | 采矿工程 | | | | | | | | | | | 教授 | | | | | 成员 | | | | 刘 勇 | | | 贵州省有色金属和核工业地质勘查局五总队 | | 地质工程 | | | | | | | | | | | 高级工程师 | | | | | 杨 亮 | | | 贵州省地质环境监测院 | | 水文、工程、环境地质 | | | | | | | | | | | 高级工程师 | | | | | 胡元艳 | | | 贵州省地质矿产勘查开发局测绘院 | | 土地资源管理 | | | | | | | | | | | 高级工程师 | | | | | 孙俪雯 | | | 贵州木林森招标造价咨询有限公司 | | 工程造价 | | | | | | | | | | | 注册造价师 | | | | | 审查申请 | 我单位已按要求编制矿产资源绿色开发利用方案（三合一），保证方案中所引数据的真实性，同意按国家相关保密规定对文本进行相应处理后进行公示，承诺批准后的方案做好矿产资源绿色开发利用工作。  请予以审查。      时间： 2024 年10 月15日 | | | | | | | | | | | | | | | | | | | | | | | | |